

1912

Catalogue A
**AUTOMOBILE
SUPPLIES**



E. J. WILLIS CO.

85, Chambers St. 67, Reade St.
New York City.

TO OUR PATRONS

Our low prices and progressive, business-like methods have made us the largest and most reliable Auto Supply House in America. We were the pioneers in this line and to-day are still leading the procession. In presenting our annual catalog for 1912 we invite your careful consideration of our prices, which you will find lower than ever before.

Our Policy

is to save every cent of expense possible, basing our prices on Cash Transactions, thus doing away with an additional clerical force and enabling us to sell our goods at prices that defy competition.

Cash on Delivery

We gladly send goods C. O. D., with the privilege of examination to any point in the United States. If they are satisfactory, you pay the express agent; if not, return them at our expense.

We Pay Transportation Charges

On all orders amounting to \$10.00 and upwards (exclusive of Carbide) from all points within a radius of 500 miles direct route from New York City and on similar orders amounting to \$50.00 and upwards to points within a radius of 1000 miles. On orders of \$10.00 and upwards from points *beyond* 500 miles we allow expressage at the rate of \$1.25 per 100 lbs. and on orders of \$50.00 and upwards from points *beyond* 1000 miles we allow expressage at the rate of \$2.50 per 100 lbs.

If you are unable to make up a \$10.00 order, induce some of your motoring friends to order with you and thus save transportation charges.

On orders where we pay transportation charges we reserve the right to ship by freight if order calls for heavy or bulky merchandise.

When goods are sent via express C. O. D. we pay for the return of the money on orders amounting to \$5.00 or over.

We do NOT pay return money charges on orders under \$5.00, and if you want to save these charges it is advisable for you to send the amount of your order in stamps, money order, or New York draft. Make all money orders, drafts, etc., payable to E. J. Willis Co.

You Can't Go Wrong

because we cheerfully refund your money if you are dissatisfied and the goods are returned to us undamaged within ten days from receipt of same.

E. J. WILLIS COMPANY

E. J. WILLIS, Pres.

85 CHAMBERS STREET

NEW YORK CITY

67 READE STREET

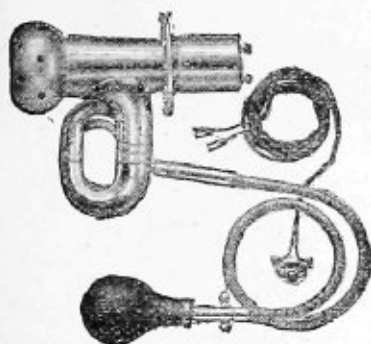
Sonora Motor Driven Electric Horns

Torpedo Type
Combination, \$25.00

Torpedo Type, \$17.50

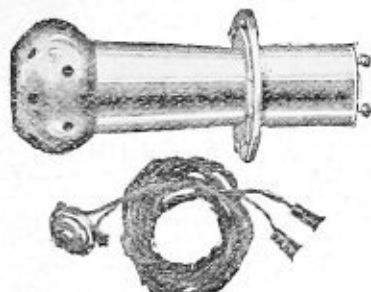
Standard Type, \$17.50

Standard Type
Combination, \$25.00



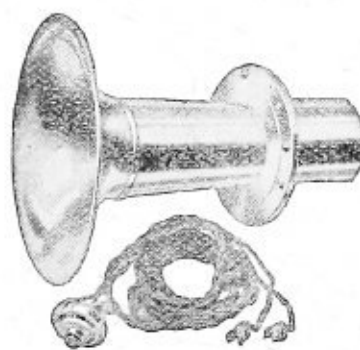
3008

Extreme Length, 12½ In.
Extreme Height 11 In.
Diameter of Bell, 4 In.



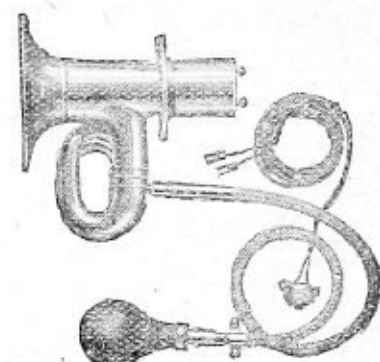
3000

Extreme Length, 12½ In.
Diameter of Bell, 4 In.



3004

Extreme Length, 11½ In.
Size of Bell, 8x6½ In.



3012

Extreme Length, 11½ In.
Extreme Height, 12 In.
Size of Bell, 8x6½ In.

**"The Horn With a Tone All Its Own" as Loud as the Loudest
and Good as the Best**

The advent of the Sonora Motor Horn on the American market has opened up a new epoch in the electric horn industry in the United States and puts within the reach of the entire motoring public a necessity at a moderate price. The Sonora Horn has been tested out as a perfect product for over SIX MONTHS, EXCLUSIVE of its EXPERIMENTAL STATE. The patented features are entirely NEW in the horn art and have all been allowed by the UNITED STATES PATENT OFFICE. That the Sonora Motor Horn is a perfect instrument the following facts will clearly show. The current consumption on batteries is very small, the motor only requiring 2½ amperes to run it. This means one set of batteries should run the Sonora Horn a full season (moderate first cost, moderate maintenance). On the Sonora Horn you find an interposed member or flat spring that is struck an inch away from the center of the diaphragm or disc. The little spring member beats up against the diaphragm or disc like a hammer and strikes about thirty thousand times to the minute. This feature does away with all rasping and metallic screech and gives you a horn with a note as smooth as a steam whistle, at the same time an ear-pleasing, voluminous tone.

The Sonora Combination Type

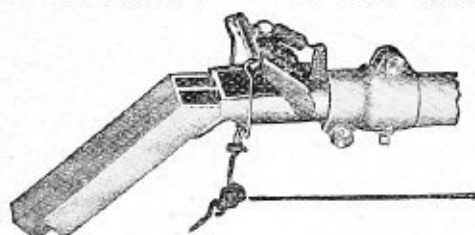
Is a combination of the Sonora Motor Horn and a reed horn of the most powerful type, giving a deep, vibrant tone. This gives you two different signals in one compact and attractive form. Its advantages are obvious—when you do not need the motor horn you have the other at your command and need not waste the electric current. It also takes up much less room than two separate horns. The horn is furnished complete with either 40 or 50 inches of the finest brass horn tubing, fitted with a large rubber bulb of the best quality. It is adapted to any car and can be attached to either side of same.

Each type of Sonora Horn can be furnished in four different styles as follows:

		Net Cash Price.		Net Cash Price.	
		Reg. Torpedo Type.	Reg. Stand. Type.	Comb. Torpedo Type.	Comb. Stand. Type.
	No.		No.		No.
All Brass, highly polished.....	Express prepaid	3000 \$16.00	3004 \$16.00	3008 \$22.50	3012 \$22.50
All Black Enamel.....	Express prepaid	3001 16.00	3005 16.00	3009 22.50	3013 22.50
Black Enamel, with Brass Bell.....	Express prepaid	3002 16.00	3006 16.00	3010 22.50	3014 22.50
All Nickel Finish.....	Express prepaid	3003 18.00	3007 18.00	3011 28.00	3015 28.00

Unless otherwise ordered, all Horns will be furnished with All Brass Finish.

Horns Guaranteed for One Year

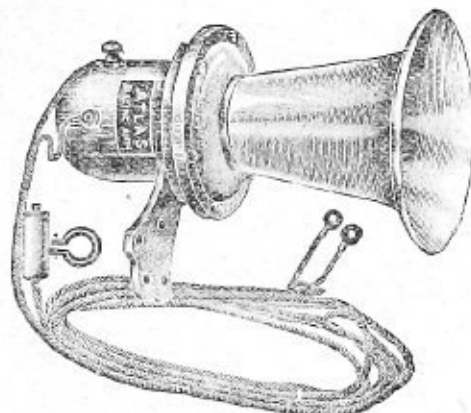
THE JUBILEE HORN—THE BEST THAT BLOWS IN TOWN OR COUNTRY.

3016

Mfrs.
No.

No.	Complete ready to attach on cars of	5 to 8 H. P.	Regular Price.	Net Cash Price.
No. 3016.	31.	5 to 8 H. P.	\$8.00	\$6.10
No. 3017.	32.	10 to 35 H. P.	8.00	6.40
No. 3018.	33.	35 to 45 H. P.	9.00	7.20
No. 3019.	34.	45 H. P.	10.00	8.00

When ordering be sure to give name, year and model of your car so that proper coupling may be furnished.

ATLAS ELECTRIC HORN.

3020

THE LOUDEST AND BEST VIBRATING ELECTRIC HORN ON THE MARKET AND FULLY GUARANTEED.

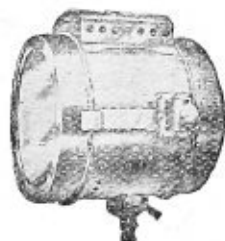
It is a clear danger signal, has a powerful penetrating sound, water and dust proof. Standard finish, highly polished brass.

Length over all 11 inches. Diameter of Bell 6 inches. Suitable for any size car.

Operates from regular ignition or lighting battery and consumes very little current.

Complete with special 2-way wire cable, terminals and push button which can be attached to the steering wheel.

No. 3020. Regular Price, \$12. Cash Price, \$6.00.



3100

PLAIN BARREL BRASS HEAD-LIGHTS

We have a few of these lamps to close out. Size between props, 7 1/4 in. Front glass, 6 3/4 in.

No. 3400. Regular Price, \$10 pair. Cash Price, \$5 per pair.

No. 3401. Size between props, 9 3/4 in. Front, 5 in. Regular Price, \$12.50 pair. Cash Price \$6.50 per pair.

The Jubilee is a high-class mellow chime horn of deep and penetrating tone. It is made of brass throughout and highly polished. It is blown by the exhaust and can be depended upon at all times to give an easily distinguishable tone above the noise and din of city traffic and can be heard around the curves of the country road far in advance. It sounds clear and distinct at any speed without racing the motor. It is operated the same as the Jericho and to those who prefer a chime we can recommend it as being superior to any other horn of this type.

Regular Price. Net Cash Price.

No. 3016. 31. Complete ready to attach on cars of 5 to 8 H. P. \$8.00 \$6.10

No. 3017. 32. Complete ready to attach on cars of 10 to 35 H. P. 8.00 6.40

No. 3018. 33. Complete ready to attach on cars of 35 to 45 H. P. 9.00 7.20

No. 3019. 34. Complete ready to attach on cars of 45 H. P. 10.00 8.00



1015

"USONA" HORN BULB GUARD.

Saves the bulb and tends to increase the volume of tone, as the bulb maintains its shape and keeps its position.

Made entirely of brass, and very highly polished.

Saves trouble, money and annoyance.

No. 1015. Price, 50c. each. Cash Price, 40c.

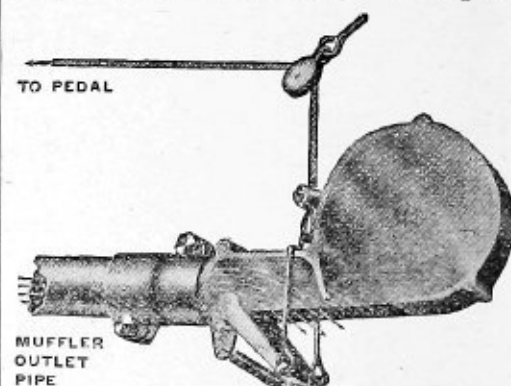
**SLIKUP**
(For Rubber)

SLIKUP is a liquid composition made for preserving and beautifying rubber. It protects pneumatic tires from the action of sunlight, preserving the life of the tire; will fill up any air holes in the rubber, PREVENTING SAND BLISTERS, and keep the rubber from cracking. It colors the rubber, at the same time obliterating all spots and stains, making the tires, etc., look exceedingly smart and new. SLIKUP is not a paint, nor anything like one, although it is applied in the same manner. It has a most peculiar rubber sticking tenacity. Rain has no effect on it, yet, as auto and tires are washed, the surface of the composition washes off, so after a few washings another coat will be needed, but there is no accumulation of matter on rubber as there would be by using successive coats of paint.

Beware of imitations, as they will only cause you trouble and ruin your tires.

White Slikup

No.	Size.	Regular Price.	Cash Price.
3402	Gal. cans	\$5.50	\$1.00
3403	Pint cans	.75	.50

JERICHO—The Perfect Motor Car Signal.

2194

Rear-of-Muffler Type.

Made of Aluminum. Largest size, 11x5 inches. Weight, including attaching coupling, 3 pounds.

Always attached in rear of muffler—either clamped to outlet pipe (1) by clamp coupling (2), or held by threaded coupling screwed into muffler itself.

Exhaust flows freely through open horn-throat (3) when horn is not in use, keeping the horn clear.

Depressing pedal closes lid, directing exhaust through shallow slot (5) and across second-chamber opening (6).

A single, mellow, distinctive note at town speed—effective without offense.

In touring becomes a powerful warning heard one to three miles.

Causes no back-pressure—avoids necessity of racing the motor—cannot clog or choke—attached at little or no expense.

Mfrs. No.	Complete ready to attach on cars of	5 to 8 H. P.	Regular Price.	Cash Price.
2194.	0.	5 to 8 H. P.	\$7.00	\$5.60
2195.	1.	10 to 20 H. P.	7.00	5.60
2196.	2.	20 to 35 H. P.	8.00	6.40
2197.	3.	35 to 45 H. P.	9.00	7.20
2198.	4.	For over 45 H. P.	10.00	8.00
2199.	23.	For special cars	9.00	7.20
2200.	24.	For special cars	10.00	8.00

When ordering state make, year and model of your car.

Prices include brass pedal, attaching coupling, cable, cable clamps, pulley, etc.



2386

DOW SWITCH.

Made of hard rubber.

Push lever to one side and one set of batteries is in use.

Push lever to other side and the second set of batteries is in use. When lever stands in center both sets are cut out.

Removing the lever cuts out all battery current regardless of position of lever.

No. 2386. Regular Price, 75c. Cash Price, 39c.

POPULAR DRAGON.

1912

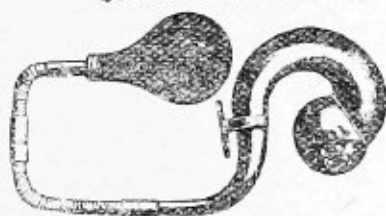
This is the latest style of horn. The bell is oval, 5 1/4 in. bell. The extra turn adds much to the tone. This horn gives a long, deep blast, and is suitable for the largest cars.

No. 1912. List Price, \$7.50. Cash Price, \$3.50.

OVAL DRAGON HORN.

1932

\$9.00. Cash Price, \$1.25.

QUESTION HORN.

1917

One of the novelties of the season. Peculiar shape makes it adaptable for cars having a limited space for horn.

No. 1917. Regular Price, \$5.00. Cash Price, \$2.75.

PURE GUM HORN BULBS.

1918

Finest quality, chemically cured, making them soft, pliable and springy. Will wear longer than any other bulb made. Mounted ready for use.

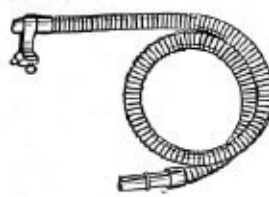
No.	Size.	Regular Price.	Cash Price.
1918	Small	\$1.00	\$0.45
1919	Medium	1.50	.60
1920	Large	1.75	.70
1921	Extra large	2.00	.80

GUARANTEED HORN REEDS.

1922

The best made. Weather does not affect them. One piece, non-corrosive, vibratory. Each one carefully tested and guaranteed.

No. 1922. Regular Price, 50c. Cash Price, 14c.

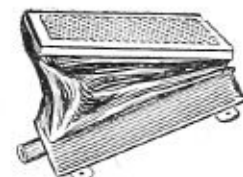


1923

FLEXIBLE HORN TUBES.

The finest grade of horn tubing. It does not break or pull apart. Made of brass, lined with asbestos, to make it absolutely airtight.

No.	Length.	Inside Diameter.	Regular Price.	Cash Price.
1923	40 in.	1/2 in.	\$1.25	\$0.70
1924	50 in.	1/2 in.	1.50	.85
1925	40 in.	3/4 in.	2.00	.85
1926	50 in.	3/4 in.	2.50	.95



1927

Price, \$1.50. Cash Price, \$1.00.

FOOT BELLOWS.

By fitting your horns with foot bellows it enables you to have free use of your hands.

Made of wood, leather covered; neatly and durably constructed.

No. 1927. Regular

"SIRENO" STEERING WHEEL SWITCH. (Patent Applied For.)

1911

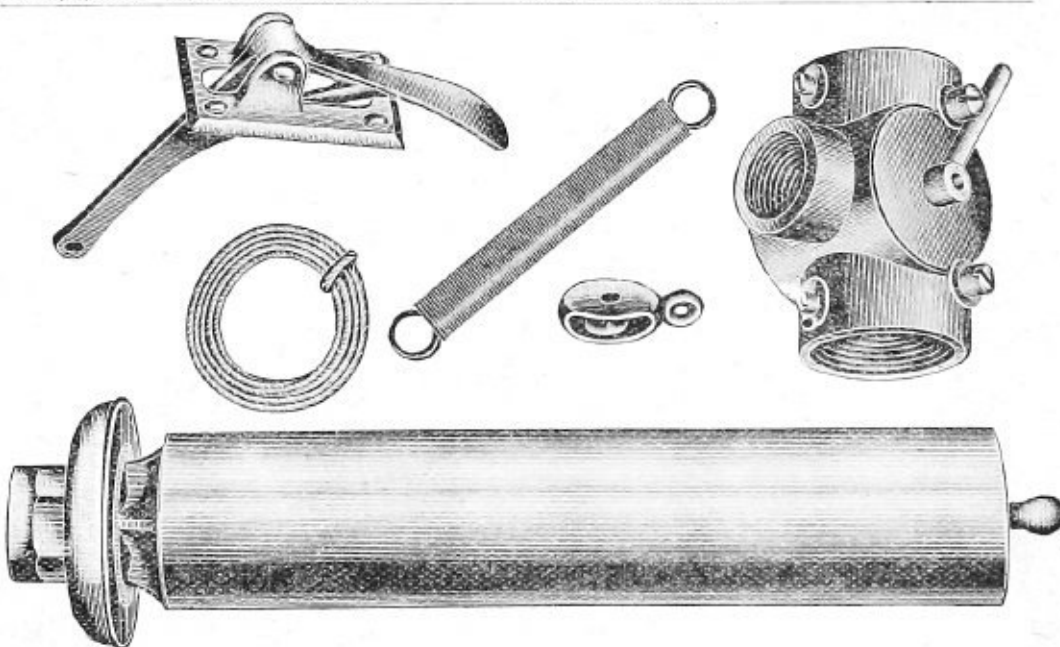
This switch, without doubt, will meet with instant favor and approval by the driver of a car who demands the best on account of the convenience of operation, construction—which is without a fault—and the general design and appearance when installed on a car. It clamps to a spoke of the steering wheel and does not interfere with the steering of the car in the slightest, as it is not attached to the rim of the wheel, as has been common practice formerly. The wires, connecting the switch with the device which it operates, are encased in a flexible brass tube of sufficient length to follow down the steering pillar, thereby avoiding the unsightly appearance of loose and unprotected wires trailing down from the steering wheel.

It can be used to operate any type of electric horn, speedometer or dash light, etc.

Regular finish, polished brass.

No. 1911. "Sireno" Steering Wheel Switch.

Cash Price, \$3.32.



3021

AMCO CHIME HORN

1912 Model Complete, Equal to Any, and Superior to Most of Them on the Market.

The AMCO Chime has 4 harmonious tones combined in one loud warning blast that clears the way. There is no chance for pressure to interfere with the working of the horn or whistle. It is always ready to use. Cannot become clogged, which is impossible by its construction, and the necessity of cleaning is done away with as it cleans itself. It is made entirely of brass tubing and heavy brass casting which will not permit of corrosion or rust.

Length of whistle over all 15 1/2 inches, diameter 2 1/2 inches.

No. 3021. Complete outfit No. 1, including the Chime Horn, Pully, Spring, Pedal, Wire Cable and either size of the following valves. For iron pipe, 1 1/4, 1 1/2 or 2 inch; for steel tubing, 1 1/4, 1 1/2 and 1 3/4 inch. List Price, \$7.50. Net Cash Price, \$1.50.

No. 3022. Complete outfit No. 2, including the Chime Horn, Pulley, Spring, Pedal, Wire Cable and either size of the following valves: For iron pipe, 2 inch; for steel tubing, 1 3/4 and 2 inch. List Price, \$10.00. Net Cash Price, \$1.85.

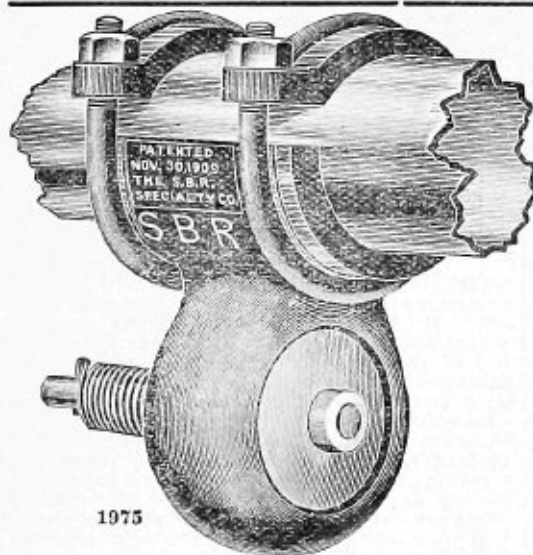
Note.—When ordering state if wanted for steel tubing. If so, give us outside diameter of same.

If wanted for iron pipe state so in your order and give us the inside diameter of same. Not the outside.

No. 3021. The Amco Chime Horn as illustrated and described above. Price for the horn only, size, 15 1/2 x 2 1/2. Regular Price, \$5.00. Net Cash Price, \$2.75.

No. 3022. Footpedal, heavy polished brass if ordered separate. Regular Price 75c. Cash Price, 45c.

On some cars a straight piece of iron pipe steel tubing or an elbow is needed to attach this chime horn. This we do not furnish.



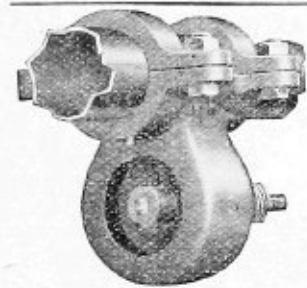
1975

S. B. R. MUFFLER CUT-OUT. (Patented.)

S. B. R. Muffler Cut-out is very practical, as it is made of malleable iron and clamps on the exhaust pipe after a V-shape hole has been cut in the pipe. The valve is in a pocket at the bottom and opens inward. The body forms a pocket to accumulate the residue and carbon from the engine, which will clear itself automatically when the valve is opened, thus preventing the clogging of the muffler.

We furnish these in any sizes to fit standard pipe thread or steel tube. Guaranteed to fit without filing or packing.

No.	Steel Tube or Iron Pipe.	Reg. Price.	Cash Price.
1975	1 in.	\$3.50	\$2.80
1976	1 1/4 in.		
1977	1 1/2 in.		
1978	1 3/4, 2, 2 1/4 in.	4.00	3.20
1979	2 1/2 in.	4.50	3.60
1980	2 3/4, 3 in.		



3023

STYLE D MUFFLER CUT-OUT VALVES

Style D is made of malleable iron and is practical, efficient, durable and easily attached by cutting a V-shaped hole in pipe and clamping in position. The valve action is controlled by an oil tempered steel spring. This cut-out opens inward and is under control of the driver. The body forms a chamber to accumulate the residue and carbon from the engine (which otherwise passes into and clogs the muffler) and clears itself automatically when the valve is opened.

No. 3023. Fits 1 in. iron pipe or 1 1/4 and 1 1/2 in. steel tubing. Regular Price, \$3.00. Cash Price, \$1.80.

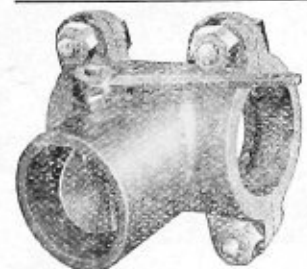
No. 3024. Fits 1 1/4 in. iron pipe or 1 1/2 and 1 3/4 in. steel tubing. Regular Price, \$3.25. Cash Price, \$1.95.

No. 3025. Fits 1 1/2 in. iron pipe or 2 and 2 1/4 in. steel tubing. Regular Price, \$3.50. Cash Price, \$2.10.

No. 3026. Fits 2 in. iron pipe or 2 1/2 and 2 3/4 in. steel tubing. Regular Price, \$3.75. Cash Price, \$2.30.

No. 3027. Fits 2 1/2 in. iron pipe or 3 and 3 1/4 in. steel tubing. Regular Price, \$4.00. Cash Price, \$2.55.

No. 3028. Fits 3 in. iron pipe or 3 1/2 in. steel tubing. Regular Price, \$4.25. Cash Price, \$2.75.



3029

STYLE C MUFFLER CUT-OUT VALVES

Made of malleable iron, excepting butterfly pin, which is of brass to prevent rusting and consequent sticking of valve. Applied by cutting a V-shaped hole in exhaust valve, clamping cut-out to it and connecting valve to pedal on footboard. Furnished in blanks so that they can be threaded or bored to suit.

No. 3029. Fits 1 in. iron pipe or 1 1/4 and 1 1/2 in. steel tubing. Regular Price, \$1.00. Cash Price, 55c.

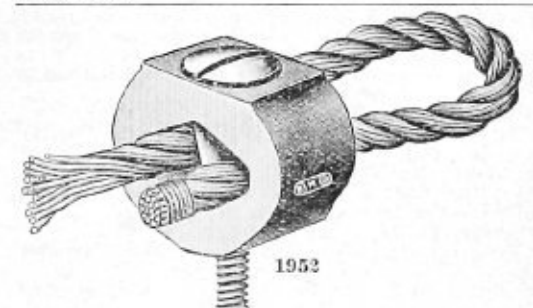
No. 3030. Fits 1 1/4 in. iron pipe or 1 1/2 in. steel tubing. Regular Price, \$1.15. Cash Price, 60c.

No. 3031. Fits 1 1/2 in. iron pipe or 2 and 2 1/4 in. steel tubing. Regular Price, \$1.25. Cash Price, 65c.

No. 3032. Fits 2 in. iron pipe or 2 1/2 and 2 3/4 in. steel tubing. Regular Price, \$1.35. Cash Price, 70c.

No. 3033. Fits 2 1/2 in. iron pipe or 3 and 3 1/4 in. steel tubing. Regular Price, \$1.50. Cash Price, 75c.

No. 3034. Fits 3 in. iron pipe or 3 1/2 in. steel tubing. Regular Price, \$1.75. Cash Price, 80c.



1952

WIRE ROPE CLAMP

Made specially for fastening ends of wire rope. Made of bronze and will not rust.

No.	List Price.	Cash Price.
1952—For 1/8 in. rope.....	\$0.45	\$0.19
1953—For 3/16 in. rope.....	.50	.21
1954—For 1/4 in. rope.....	.60	.23
1955—For 5/16 in. rope.....	.70	.25
1956—For 3/8 in. rope.....	.85	.30

Cash Price.

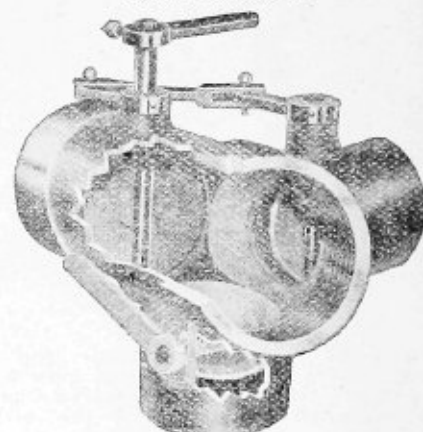
1948—1/16 in., per ft.....	\$0.02
1948A—3/16 in., per ft.....	.04
1949—1/8 in., per ft.....	.04
1949A—1/4 in., per ft.....	.06
1950—5/16 in., per ft.....	.07



1948

FLEXIBLE STEEL CABLE.

"WILCO" COMBINATION HORN VALVES AND CUT-OUT



3035

Wilco valves are made of malleable instead of gray iron, as commonly used. The butterflygates are closely fitted on heavy brass pins, which will not rust and prevent free action of the gates. The direct passage to horn and cut-out affords maximum pressure on horn and perfect relief to muffler. They are furnished in blanks and can be threaded to fit standard iron pipe sizes or bored for steel tubing. Iron pipe is measured on inside; steel tubing on outside. All openings for the horn are drilled for 1 inch iron pipe and threaded.

No. 3035. Fits 1 in. iron pipe or 1 1/4 and 1 1/2 in. steel tubing. Regular Price, \$1.50. Cash Price, 65c.

No. 3036. Fits 1 1/4 in. iron pipe or 1 1/2 and 1 3/4 in. steel tubing. Regular Price, \$1.75. Cash Price, 75c.

No. 3037. Fits 1 1/2 in. iron pipe or 2 in. steel tubing. Regular Price, \$2.00. Cash Price, 85c.

No. 3038. Fits 2 in. iron pipe or 2 1/2 and 2 3/4 in. steel tubing. Regular Price, \$2.25. Cash Price, 95c.

No. 3039. Fits 2 1/2 in. iron pipe or 2 3/4 and 3 in. steel tubing. Regular Price, \$2.50. Cash Price, \$1.05.

No. 3040. Fits 3 in. iron pipe or 3 1/2 and 3 3/4 in. steel tubing. Regular Price, \$2.75. Cash Price, \$1.15.

SWIVEL CABLE PULLEY.



2210

For use with wire cable in connection with cut-outs, make operation easy.

No. 2210. Regular Price \$0.08 each. Cash Price \$0.05.

THE YANKEE SILENT MUFFLER

"Yankee" Muffler, Pat'd Aug 31 1909.



1965

A light, strong and reliable muffler. Suitable for any gasoline engine; works at any speed, without back pressure or noise. This muffler increases power and quickly expels burnt greases, keeping engine cool at all times. Without cut-out.

No.	Size.	Regular Price.	Cash Price.
1965	6 1/2 x 12 in.	\$6.00	\$3.50
1966	6 1/2 x 18 in.	7.00	4.25
1967	6 1/2 x 24 in.	8.00	4.75
1967A	6 1/2 x 30 in.	9.00	5.00

Note—When ordering mufflers, state make and model of your car, horsepower and number of cylinders, if exhaust pipe is threaded iron or steel tubing, inside and outside diameter of pipe.

FLASH DECARBONIZER

No automobilist or motor boat owner should be without it.



2083

aerated by the combustion and the mephitic vapors thrown off will check and decay carbon deposits in cylinders, top of pistons, valves, exhaust pipe and muffler and is carried away through exhaust in a black cloud.

FLASH DECARBONIZER—the original German success—is guaranteed not to destroy the glaze or glassy surface of the cylinder walls, nor to cause pistons to pump oil, which is the great objection to use of kerosene or chemical liquid carbon removers.

Carbon in cylinders is the cause of most engine troubles. Carbon deposits may be prevented by the regular use of this carbon remover. One package is sufficient to clean a large engine two times.

Regular Price, \$1.00. Cash Price, 50c.

Full directions with each package.

Order No. 2083.

FLASH DECARBONIZER

contains no chemical and will not injure the finest motor. It is the Home way. It is the Cheap way. Use it and there will be no painful settling of garage bills for repairing carbonized cylinders.

Not a single motor has been torn down on account of carbon troubles where Flash Decarbonizer has been used.

FLASH DECARBONIZER is a compound dissolvent in dry form for the prevention and removal of carbon deposits in gas and gasoline engines.

This dissolvent is placed in the cylinders is



1028

No.	Price.	Cash Price.
1028	Quart cans.....\$1.00	\$0.80
1029	1/2 gal. cans.....2.00	1.55
1030	Gallon cans.....3.75	3.00



1764

AUTO SHIRT FOR MEN OR WOMEN.

This shirt or slip-over is a rainy-day necessity. It covers the body completely from the head down, and keeps the wearer absolutely dry. It is cut with full skirt, elastic at sleeve and draw-string at neck. Has double fly front, which keeps out even the driving rain. Made of especially prepared fine waterproof fabrics. Can be worn by men or women.

No.	List Price.	Cash Price.
1764—Black	.....\$6.00	\$3.45
1765—Black, extra quality	.....7.00	4.50
1766—Tan, extra quality	.....9.00	4.75
1767—White, extra quality	.....9.00	6.00
1768—Terra cotta, extra quality	10.00	4.75



1773

RUBBER CAPS.

These caps are dull finish and supplied with cape. They afford perfect protection for head and neck.

No. 1773. Cap with cape, black or terra cotta. Cash Price, 75c.



1968

FOOT PEDALS.

Style Lock Foot Pedal for opening cut-outs. This pedal locks automatically, and by a little pressure of the toe on the upright piece the same is unlocked.

This pedal is something entirely new.

No. 1968. List Price, \$1.00. Cash Price, 45c.



1974

PERFECT LOCKING PEDALS.

It allows the operator to control the engine and at the same time steer with one hand, change speeds with the other.

No. 1974. Regular Price, \$1.25. Cash Price, 65c.



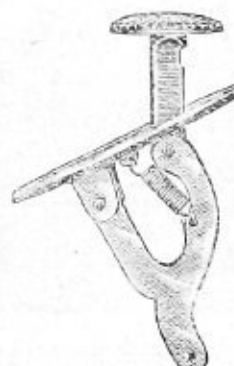
1970

STYLE "F" PEDAL.

Solid brass, highly polished, attached to footboard.

No. 1970. Small Size. Regular Price, 75c. Cash Price, 25c.

No. 1970A. Large Size. Regular Price, \$1.00. Cash Price, 35c.

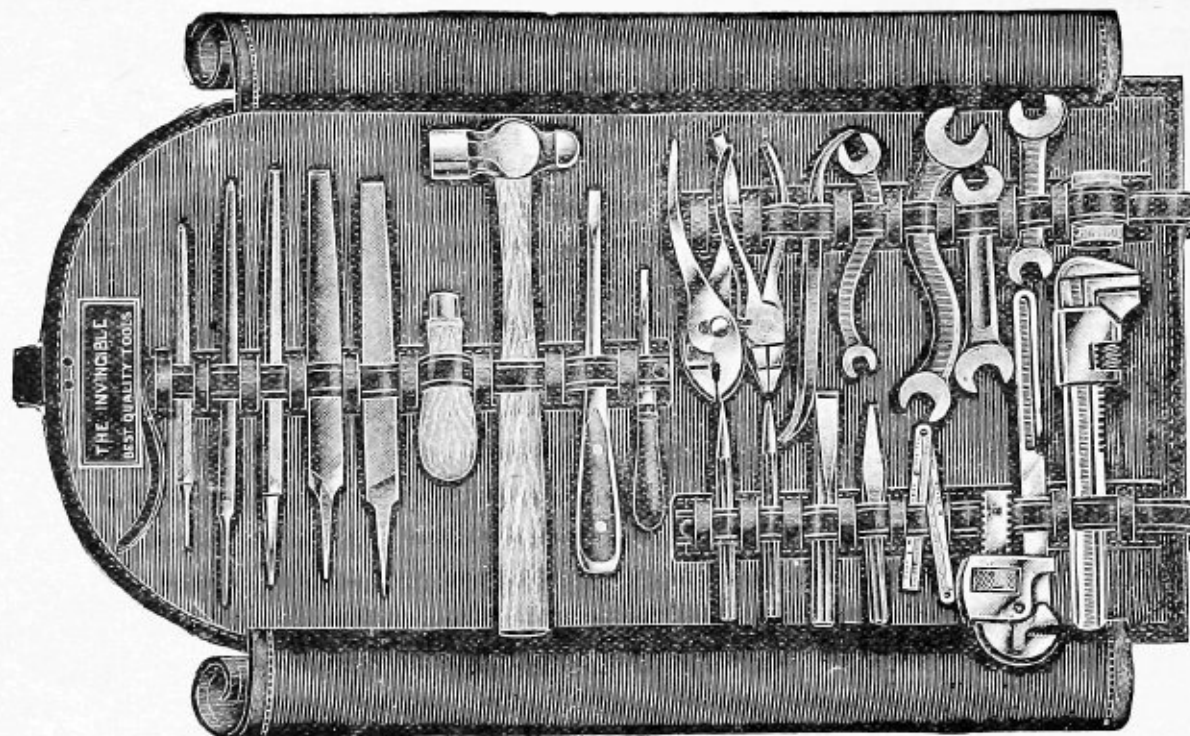


3041

SPECIAL HEEL PEDAL

A heavy solid brass pedal for operating cut-out by pressing with the heel. Handy and practical.

No. 3041. Regular Price, \$1.25. Cash Price, 60c.



2255
Invincible.

- 1 Automobile Wrench, length, 9 inch.
- 1 Stillson Wrench, 10 inch.
- 1 Steel Folding Rule.
- 1 Caping Chisel, $\frac{3}{8}$ inch.

- 1 Cold Chisel, $\frac{1}{2}$ inch.
- 1 Large Centre Punch.
- 1 Large Prick Punch.

No. 2255. Invincible, containing 24 tools,

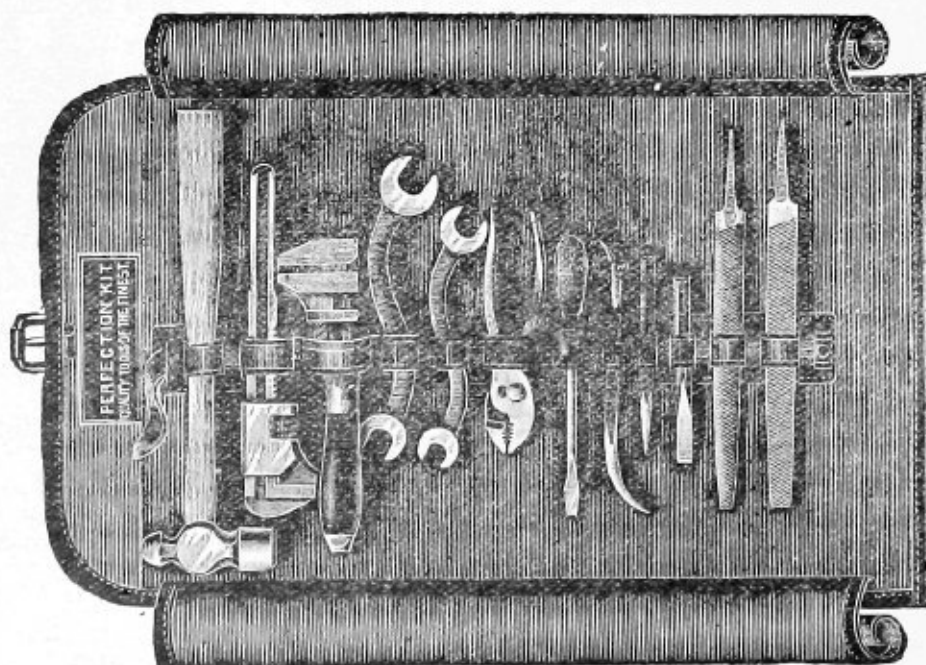
including bag. Regular Price, \$10.00. CASH PRICE \$5.25.

No. 2255A. Tool Roll only. CASH PRICE 90c.

New improved best quality Automobile Tool Kits. With best quality Mechanics' tools. Extra fine quality waterproof canvas bag, dark color, leather bound. Extra stitched best harness leather straps. Easily adjusted.

Length of Bag, 30 inches. Width of Bag closed, 14 $\frac{1}{4}$ inches.

- 1 Three Square File.
- 1 Round File.
- 1 Square File.
- 1 Half Round File.
- 1 Flat File.
- 1 File Handle, Hardwood.
- 1 Ball Pein Hammer, 12 oz.
- 1 Perfect Handle Screw Driver, 5 inch.
- 1 Rosewood Screw Driver, 3 inch.
- 1 Nickel Plated Steel Slip Joint Plier, 6 $\frac{1}{2}$ inch.
- 1 Combination Side Cutting Plier.
- 1 Large Cotter Pin Extractor.
- 1 S Wrench, for Nuts, 3-16 x $\frac{1}{4}$. Mottled, hardened and tempered.
- 1 S Wrench, for Nuts, 5-16 x $\frac{3}{8}$. Mottled, hardened and tempered.
- 1 Double End Wrench, for Nuts, 3-16 x $\frac{1}{4}$. Mottled, hardened and tempered.
- 1 Double End Wrench, for Nuts, 5-16 x $\frac{3}{8}$. Mottled, hardened and tempered.
- 1 Spool of Copper Wire.



2256
Perfection.

New improved best quality Automobile Tool Kits. Made of extra heavy canvas, dark color, real leather trimmed, all harness leather straps used. One of the best Kits on the market.

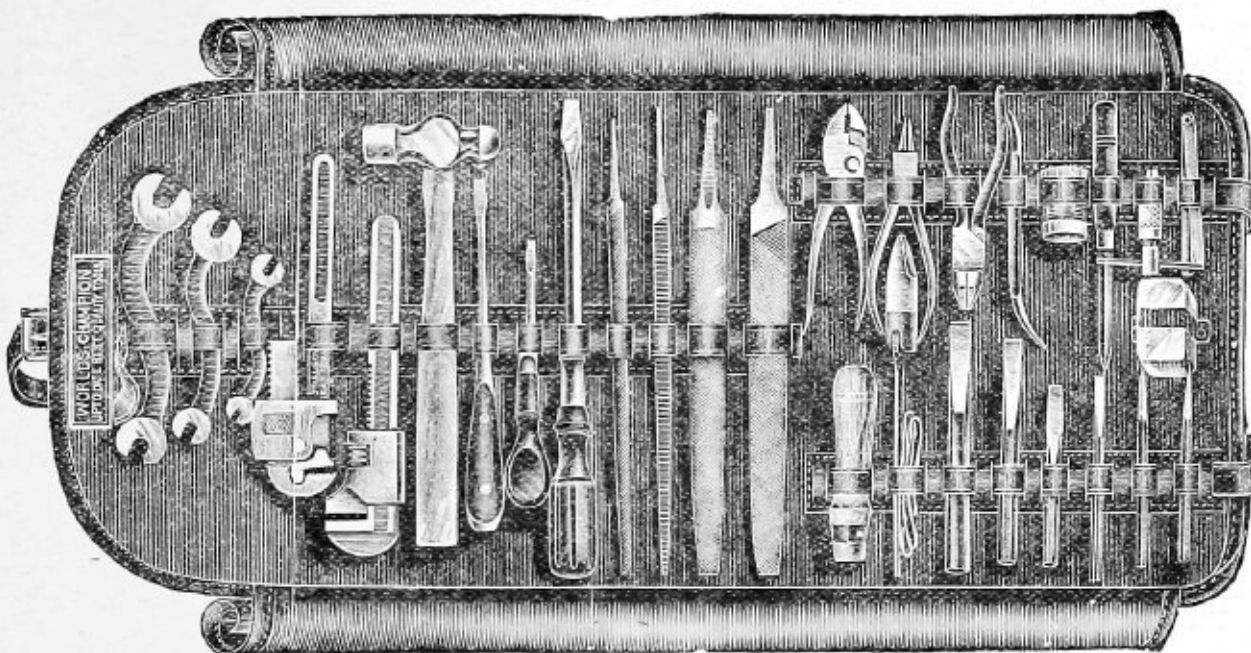
The most convenient Kit of Tools on the market. In case of an emergency on the road this is the Kit of Tools that is desired. All Tools contained in same are best first quality goods.

Length of Bag, 24 inches. Width of Bag closed, 14 inches.

- 1 each of the following Tools in this Kit:
- Cold Chisel, $\frac{1}{2}$ inch.
- Automobile Centre Punch.
- Round Handle Screw Driver, 5 inch.
- S Wrench for Nuts, 3-16 and $\frac{1}{4}$ inch.
- S Wrench for Nuts, 5-16 and $\frac{3}{8}$ inch.
- Cotter Pin Puller.
- Flat File, 8 inch.
- Half Round File, 8 inch.
- Automobile Wrench, 9 inch.
- Wood Handle Wrench, 10 inch.
- Machinists' Hammer, 12 oz.
- Nickel Slip Joint Steel Plier, 6 $\frac{1}{2}$ inch.

No. 2256. Perfection Kit, complete, containing 12 Tools and Bag. Regular Price \$5.00. CASH PRICE \$2.75.

No. 2256A. Tool Roll only. CASH PRICE 65c.



1122
World's Champion.

New improved extra quality large Automobile Tool Kits, with best quality Mechanics' Tools. Extra fine quality waterproof canvas bag, dark color, real leather bound, extra stitched. Best harness leather straps easily adjusted. One of the handsomest and best kits of tools ever offered. Best kit on the market.

Length of Bag, 35 in.
Width of Bag closed, 14 1/4 inches, which is standard width.

Largest Kit on the market.

One only of the following best quality tools in this Kit:

S Wrench for Nuts., 3-16x1 1/4 inch. Mottled, hardened and tempered.
S Wrench for Nuts., 7-16x1 1/2 inch. Mottled, hardened and tempered.
Automobile Wrench, 9 inch.
Stillson Wrench, 10-inch.
Machinists' Hammer, 12 ounce.

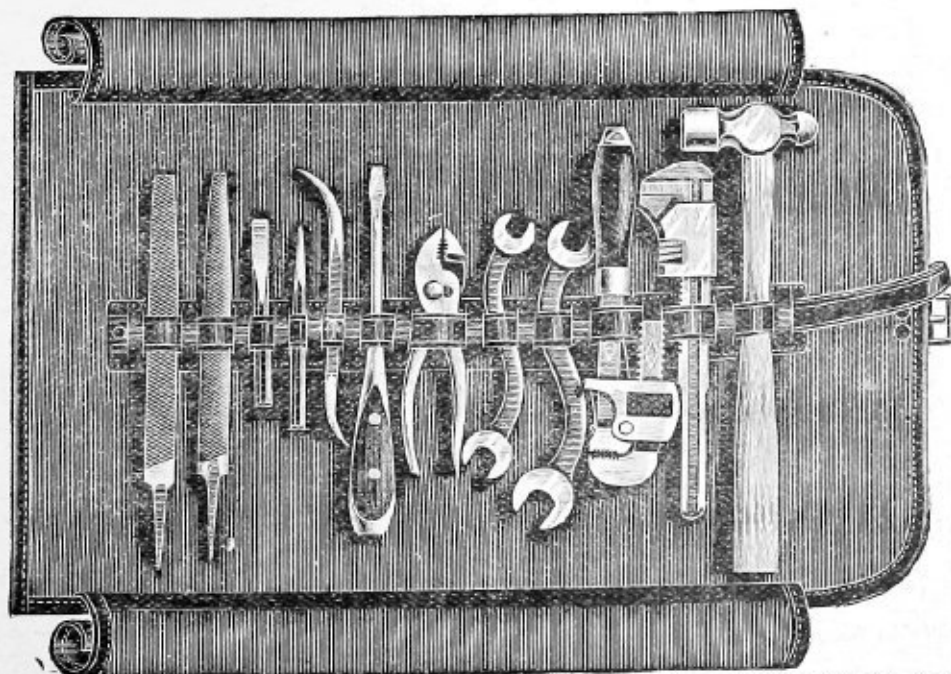
Solid Handle Screw Driver, 5-inch.
Ebony Handle Screw Driver, 3 inch.
Square Blade Screw Driver, 7 inch.
Nickel Slip Joint Steel Plier, 6 1/2 inch.
Round Nose Wire Bending Plier, 6 inch.
Side Cutting Plier, 6 inch.
Centre Punch, large.
Prick Punch, large.
Folding Pocket Steel Rule, 12 inch.
1 Package of Solder.

Round File.
Square File.
Half Round File.
Flat File.
File Handle, Hardwood.
Soldering Iron, 1/2 lb.
Cotter Pin Puller.
Bearing Scraper, the Best Made.
Spool of Copper Wire.
Tap Wrench.

Cold Chisel, 3/4 inch.
Cold Chisel, 1/2 inch.
Cold Chisel, 5/8 inch.
Caping Chisel, 3/4 inch.
Box of Cotter Pins, assorted.

No. 1122. Regular price \$15.00 per Kit, containing 31 articles, including bag. CASH PRICE \$6.25.

No. 1123. Tool Roll only. CASH PRICE \$1.25.



No. 1120. Above Kit complete, containing 12 tools and bag. CASH PRICE, \$3.50.
No. 1121. Tool Roll only. CASH PRICE, 75c.

New improved best quality Automobile Tool Kits. Made of extra heavy canvas, dark color, real leather trimmed. All harness leather straps used. One of the best kits on the market.

The most convenient kits of tools on the market. In case of an emergency on the road this is the kit of tools that is desired. All tools contained in same are best first quality goods.

Length of bag, 24 inches.

Width of bag closed, 14 inches.

One each of the following best quality tools in this kit:

Cold Chisel, 1/2 inch.

Automobile Centre Punch.

Solid Handle Screw Driver, 5 inch.

S Wrench, 1/2 and 5/8. Mottled, hardened and tempered.

S Wrench, 5/8 and 3/4. Mottled, hardened and tempered.

Cotter Pin Puller.

Flat File, 8 inch.

Half Round File, 8 inch.

Automobile Wrench, 9 inch.

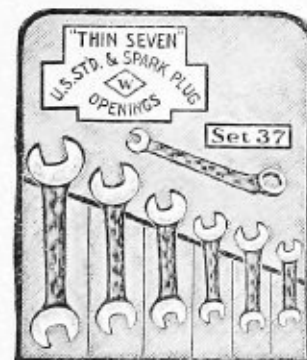
Stillson Wrench, 10 inch.

Machinists' Hammer, 12 oz.

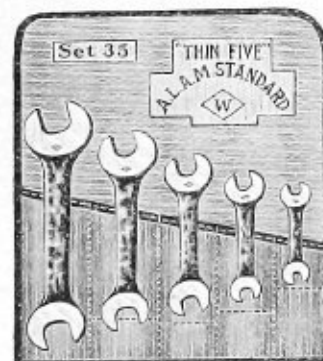
Nickel Slip Joint Steel Plier, 6 1/2 inch.



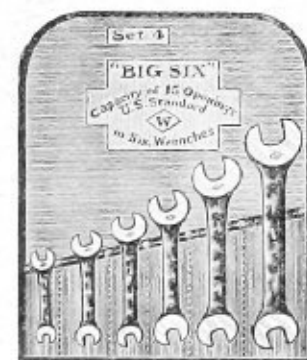
3012



3013



3014



1107

WILLIAMS 1912 DROP FORGED HARDENED, POLISHED AND FINISHED AUTOMOBILE WRENCHES

"EXTRA CAPACITY" SET, "THIN SIX," NO. 34

With Openings for Most Popular U. S. Standard Nuts and Screws for Lighter Service

No.	Nuts.		Cap Screws.		Openings, Milled.	Extreme Length.	Thickness Heads.
	Small Head.	Large Head.	Small Head.	Large Head.			
623D	1/4	1/4	5/16	7/16	1/2	4 3/8	9/64 & 5/32
626X	3/8	3/8	...	9/16	11/16	5 1/2	5/32 & 3/16
628	5/16	7/16	...	19/32	25/32	5 1/2	5/32 & 3/16
629D	...	7/16	1/2	5/8	3/4	6 7/8	3/16 & 7/32
634	1/2	5/8	5/8	...	7/8	1 1/16	7/32 & 9/32
635E	...	3/4	3/4	1	1	1 1/4	9/32 & 5/16

No. 3012. Set complete in bag, best finished. Regular Price, \$3.50. Cash Price, \$1.85.

AUTOMOBILE SET WITH SPARK PLUG WRENCH, "THIN SEVEN," NO. 37

With Openings for U. S. Standard Nuts, Cap Screws and Spark Plug, Etc., for Lighter Service

No.	Nuts.		Cap Screws.		Openings, Milled.	Extreme Length.	Thickness Heads.
	Small Head.	Large Head.	Small Head.	Large Head.			
623D	1/4	1/4	5/16	7/16	1/2	4 3/8	9/64 & 5/32
626X	3/8	3/8	...	9/16	11/16	5 1/2	5/32 & 3/16
628	5/16	7/16	...	19/32	25/32	5 1/2	5/32 & 3/16
629D	...	7/16	1/2	5/8	3/4	6 7/8	3/16 & 7/32
634	1/2	5/8	5/8	...	7/8	1 1/16	7/32 & 9/32
635E	...	3/4	3/4	1	1	1 1/4	9/32 & 5/16
9358p.	3/8	1/2	3/8	1/2	9/16	7/8	5/16 & 1/2

No. 3013. Set complete in bag, best finish. Regular Price, \$4.33. Cash Price, \$2.25.

AUTOMOBILE SET, "THIN FIVE," NO. 35

With Openings Milled for A. L. A. M. Standard Nuts and Cap Screws for Lighter Service

No.	A. L. A. M. Nuts and Cap Screws.		Openings, Milled.	Extreme Length.	Thickness Heads.
	Diam.	Head.			
623E	1/4 & 5/16	...	3/8 & 1/2	4 3/8	9/64 & 5/32
626X	3/8 & 7/16	...	9/16 & 11/16	5 1/2	5/32 & 3/16
629E	1/2 & 9/16	...	3/4 & 7/8	6 1/2	3/16 & 7/32
632X	5/8 & 11/16	...	15/16 & 1	8 1/2	7/32 & 9/32
635G	3/4 & 7/8	...	1 1/8 & 1 1/4	10 3/8	9/32 & 5/16

No. 3014. Set complete in bag, best finish. Regular Price, \$3.15. Cash Price, \$1.65.

ORIGINAL "EXTRA CAPACITY" SET, "BIG SIX," NO. 4

With Openings Milled for Most Popular U. S. Standard Nuts and Cap Screws for Severe Service

No.	For Nuts.		Cap Screws.		Openings, Milled.	Ex- treme ness Lgth.	Thick- ness Heads.
	Diam.	Head.	Diam.	Head.			
725	1/4	1/4	5/16	7/16	1/2	4 7/8	9/32
27C	3/8	3/8	...	9/16	11/16	5 7/8	5/16
28	5/16	7/16	...	19/32	25/32	6 7/8	11/32
729	...	7/16	1/2	5/8	3/4	6 7/8	11/32
34	1/2	5/8	5/8	...	7/8	1 1/16	1/2
736	...	3/4	3/4	1	1	1 1/4	9/16

No. 1107. Set complete in bag, best finish. Regular Price, \$4.00. Cash Price, \$2.25.
No. 1108. Set complete in bag, semi finish. Regular Price, \$3.25. Cash Price, \$1.75.
No. 1109. Set complete in bag, unfinished. Regular Price, \$2.25. Cash Price, \$1.25.

WILLIAMS' 1912 IMPROVED RATCHO RATCHET WRENCHES



2294

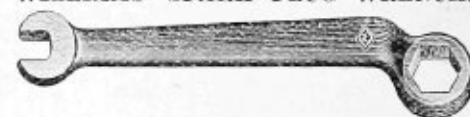
The advantage comes in on its idle stroke. The short jaw rolls off of flat on back stroke and releases the other jaw from opposite flat in one motion. Reversible by simply turning tool over. Has thrice the efficiency of any ordinary wrench.

Six in a set; packed in canvas roll; 12 sizes, from 1/4 to 1 inch.

No. 2294. Semi-finished. Regular Price, \$3.25. Cash Price, \$2.25.

No. 2295. Finished. Regular Price, \$4.00. Cash Price, \$2.75.

WILLIAMS' SPARK PLUG WRENCH.



2296.

Concentration, efficiency and small cost are apparent to you in this Tool. Drop forged from steel.

No. 2296. Unfinished. Regular Price, 40c. Cash Price, 29c.

No. 2297. Finished. Regular Price, 80c. Cash Price, 57c.



"VULCAN" AUTO TOOL

A Williams' drop forged tool that will do the work.

A Pocket Tool Chest.

1. Hammer.
2. Tire lug wrench.
3. Cotter pin puller.
4. Gas tank wrench.
5. Wire insulation scraper.
6. Air tank wrench.
7. Spark plug wrench.
8. Alligator wrench.
9. Cotter pin spreader.
10. Three screw drivers.
11. Bottle opener.
12. Bottle opener.

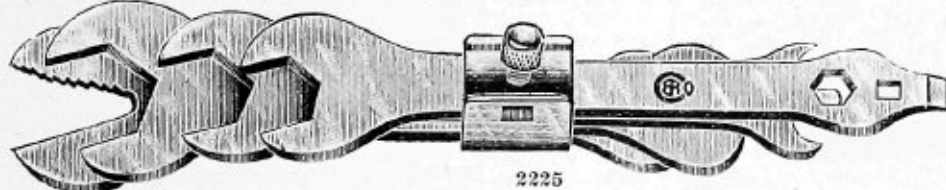
No. 1119. Cash Price, 74c.

WALDEN WRENCH SET.

2224

This set contains ratchet wrench, which works in both directions; an extension bar for reaching into difficult places a universal joint for working at an angle; 15 assorted steel sockets that cover all standard nuts and spark plugs. A very complete equipment, big time saver, and indispensable to every motorist. Handsome, serviceable leather case, 10½x4x2½ in.

No. 2224. Cash price \$5.00.

THE IMPROVED "TWIN-GRIP" WRENCH, 9 TOOLS IN ONE.

2225

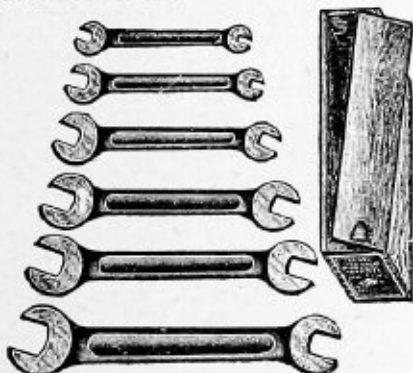
An Absolute Necessity to Every Automobilist.

The simplicity and convenience of the "Twin-Grip" Wrench is so very apparent that every automobilist who has had to spend all kinds of time looking for the right-sized "S" wrench to fit a certain nut will appreciate it. This Wrench is made of the finest forged steel, nicely nicked and polished. It is a combination of eight different wrenches, all standard sizes, and a first-class screw-driver. No automobilist can afford to be without one. Every Wrench Guaranteed.

No. 2225. Regular price \$1.00; cash price 50c.

STRAIGHT DOUBLE-END WRENCHES.

Straight double-end forged finished wrenches, hardened and tempered, mottled finish, polished heads. All standard sizes for automobiles and motor boats.



2226

One only each Wrench. Takes from ¼ to ½ in. nuts. Lengths from 13¼ to 7¾ in. Put up in sets in a nice wooden box. Six in a set. Hardened and tempered.

No. 2226. Regular price \$3.00; cash price \$1.45.

Double End Standard Set. Same as above, unfinished.

No. 2227. Regular price \$2.00; cash price 59c.

Beware of cheap imitations.

WILLIAMS' HIGHEST GRADE WRENCHES.

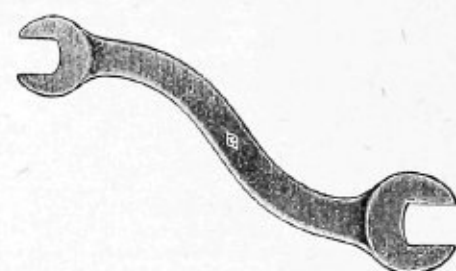
For those who wish the finest quality money can buy we recommend these special goods Extra hard and beautifully finished.



2230

Double End Straight.

No.	Openings.	Regular Price.	Cash Price.
2230	7-16x½	\$0.36	\$0.25
2231	9-16x11-16	.44	.28
2232	19-32x25-32	.48	.30
2233	¾x¾	.52	.35
2234	¾x1 1-16	.80	.45
2235	1x1¼	1.02	.59
2230A	Complete set 6 wrenches	2.00	



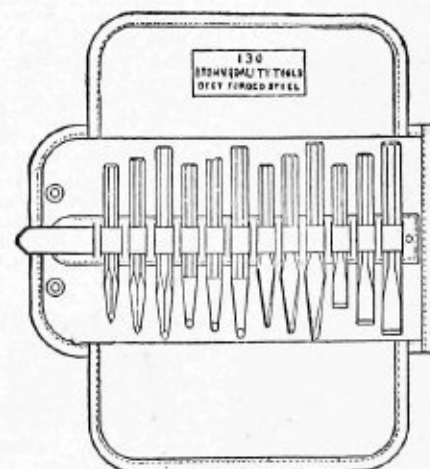
2236

Double-End S Wrenches.

No.	Openings.	Regular Price.	Cash Price.
2236	¾x½	\$0.26	\$0.17
2237	9-16x11-16	.44	.28
2238	¾x¾	.56	.38
2239	15-16x1	.68	.40
2240	1½x1¼	.88	.49
2236A	Complete set 5 wrenches	1.60	

COMBINATION CHISEL TOOL KIT.

Heavy canvas roll, leather trimmed, and has real leather straps. Octagon steel blued finished. Best quality Brown's tools.



2241

Kit containing one each of the following 12 tools:

Cold Chisels—Diameters, ¾, ½, ¼ in. Lengths, 5, 6, 6½ in.

Half Round Caping Chisels—Diameters, 5-16, ¾, ½ in. Lengths, 5½, 5½, 6½ in.

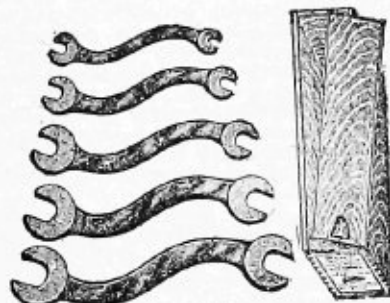
Round Nose Chisels—Diameters, 5-16, ¾, ½ in. Lengths, 5, 5½, 6, 6½ in.

Diamond Point Chisels—Diameters, 5-16, ¾, ½ in. Lengths, 5½, 6, 6½ in.

No. 2241. Regular price \$1.50; cash price \$1.00.

GENERAL PURPOSE WRENCHES.

General purpose forged finished Wrenches, hardened and tempered, mottled finish, polished heads. All standard sizes for automobiles and motor-boats.



2228

One only each Wrench. Takes from 3-16 to ½ in. nuts. Lengths, from 6¼ to 10¾ in. Put up in sets in a nice wooden box. Five in a set.

No. 2228. Hardened and tempered. Regular price \$3.00; cash price \$1.25.

Double End S Wrench Set. Same as above, unfinished.

No. 2229. Regular price \$2.00; cash price 59c.

ASSORTED LOCK WASHERS

1133

Put up in tin boxes containing about 50 of the best quality thin, strong lock washers, ranging from $\frac{1}{8}$ to $\frac{3}{16}$ in. hole, advancing by $\frac{1}{16}$.

No. 1133. Regular Price, 50c. Cash Price, 16c.

ASSORTED HEXAGON NUTS.

1134

Put up in tin boxes containing 25 semi-finished hexagon nuts.

$8\frac{1}{4}$, $9\frac{5}{16}$, $8\frac{3}{8}$ in.

Very best sizes and quality. Adapted for auto purposes.

No. 1134. Regular Price, 50c. Cash Price, 12c.

ASSORTED COTTER PINS.

1135

Put up in tin boxes containing about 125 of the best assortment of spring cotters used in connection with automobiles. Sizes range from $\frac{1}{16}$ in. diam., $\frac{3}{4}$ in. long to $\frac{1}{4}$ in. diam., 2 in. long.

No. 1135. Regular Price, 25c. Cash Price, 6c.

ASSORTED CAP SCREWS.

1136

Put up in assorted boxes containing 14 assorted from $\frac{1}{8}$ in. diam., $\frac{1}{2}$ in. long, to $\frac{1}{2}$ in. diam., $1\frac{1}{2}$ in. long. The very best quality screws, turned from steel bar. The best assortment for auto use.

No. 1136. Regular Price, 50c. Cash Price, 14c.

ASSORTED TAPER PINS.

1137

Put up in tin boxes containing about 40 of the best auto sizes of finest quality steel taper pins, ranging from 1 in. long, $\frac{3}{32}$ in. head, to $2\frac{1}{2}$ in. long, $\frac{1}{4}$ in. head.

No. 1137. Regular Price, 75c. Cash Price, 25c.

CASTELLATED NUTS.

2111

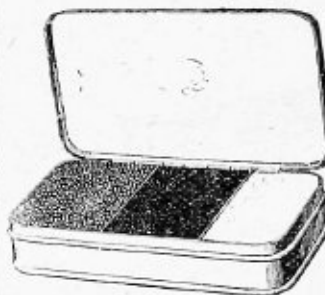
A reliable Lock-Nut. 25 assorted sizes.

No. 2111. A L A M Thread. Price \$1.00. Cash Price, 39c.

No. 2111A. Regular Standard Thread. Reg. Price, \$1.00. Cash Price, 30c.

VALGRINOK.

A Valve-Grinding Compound that Really Grinds.



1172

Valgrinok is the best grinding compound made, because it really grinds and doesn't dry up or shrink as most of the other compounds on the market do.

It is put up in a neat metal box.

Three grades in each box: coarse, medium and fine. Each box contains enough compound to grind at least 50 valves. We guarantee every box to prove satisfactory.

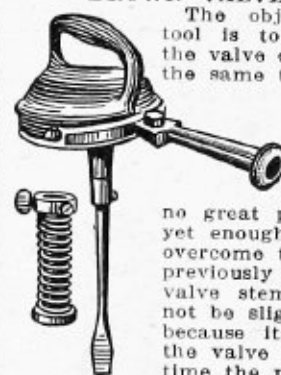
No. 1172. Price, 50c. Cash Price, 25c.

EUREKA VALVE GRINDING COMPOUND.

1170

A quick, clean and smooth cutting compound. Will make valves that are in very bad condition gas tight in a very few minutes, without scratching or grooving. Put up in boxes containing three grades, coarse, medium and fine.

No. 1170. Eureka. Cash Price, 25c.

BROWN VALVE GRINDER.

1169

The object of the Brown tool is to make grinding in the valve easy, efficient and at the same time performing the work in about one-quarter the time allotted by older methods.

While the tool is light in weight no great pressure is required, yet enough must be added to overcome the lifter which has previously been clamped to the valve stem. The lifter must not be slighted in importance, because its agency is to lift the valve from the seat, each time the pressure is taken off the valve top.

No. 1169. Brown Valve Grinder. List Price, each, \$3.50. Cash Price, \$2.90.

RAPID CUT COMPOUND.

1171

For grinding valves, piston rings and crank shaft bearings. It contains no emery or ground glass, grinds faster than any other grinder, and remains on the seat while grinding.

No. 1171. Rapid Cut. Cash Price, 18c.

SPRING COTTER PINS. STEEL. FIRST QUALITY.

2112

Sizes: $1-16 \times \frac{1}{8}$, $1-16 \times \frac{1}{4}$, $1-16 \times 1$, $3-32 \times \frac{1}{8}$, $3-32 \times 1$, $5-64 \times \frac{1}{8}$, $5-64 \times 1$ inch.

Any of the above sizes, per 100, 7c.

Sizes: $\frac{1}{8} \times \frac{1}{4}$, $\frac{1}{8} \times 1$, $\frac{1}{4} \times 1$, $\frac{1}{4} \times 1\frac{1}{2}$, $\frac{1}{4} \times 2$ in.

Any of above sizes, per 100, 12c.

Sizes: $5-32 \times 1$, $5-32 \times 1\frac{1}{4}$, $5-32 \times 1\frac{1}{2}$, $5-32 \times 1\frac{3}{4}$ inches.

Any of above size, 15c.

Sizes: $3-16 \times 1$, $3-16 \times 1\frac{1}{4}$, $3-16 \times 1\frac{1}{2}$, $3-16 \times 2$ inches.

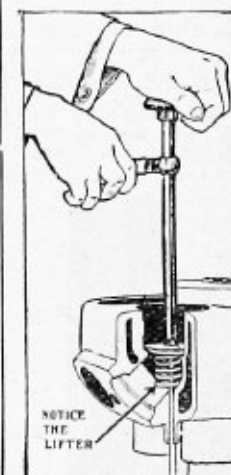
Any of the above sizes, 25c.

REGULAR SIZES AND STANDARD LOCK WASHERS FOR AUTOMOBILES.

2113

Sizes: $\frac{1}{4}$, $5-16$ or $\frac{3}{8}$ hole. Any of above sizes or assorted, per 100, 19c.

Sizes: $7-16$, $\frac{1}{2}$ or $\frac{3}{4}$ hole. Any of above sizes or assorted, per 100, 35c.

COMBINATION VALVE GRINDER AND SCREW DRIVER.

2114

This tool is 12 inches long. The knob at the top is on a swivel which lets the rod turn without moving the knob. The handle on the side moves up and down in a groove, thus enabling the operator to work with ease around pipes and fittings.

As a screw driver it removes big screws which for any reason an ordinary screw driver cannot remove. Made of nickel and packed in individual carton.

No. 2114. Regular Price, \$1.75. Cash Price, \$1.15.

FILE FOR SHARPENING PLATINUM POINTS.

2115

Very handy small vest pocket file for Platinum Points, 4 inches long.

No. 2115. Cash Price, 10c.



MOSSBERG DOUBLE END WRENCHES.

General service wrenches as used by all good machinists and automobilists. They are strong and thoroughly hardened and tempered and semi-finished.

No.	Extreme Length, In.	Size of Openings, In.	List Price.	Cash Price.
1111	4 1/4	1/4 and 5/16	\$0.15	\$0.08
1112	5	3/8 and 7/16	.20	.12
1113	6 1/4	1/2 and 9/16	.25	.15
1114	7 1/2	5/8 and 3/4	.30	.20

No. 1118. Complete set of 7 wrenches, giving 14 standard and most useful sizes. List Price, \$2.45. Cash Price, \$1.40. Price does not include bag.

TOOL STEEL BALLS.



1138

Highest grade manufactured.

No.	Diameter.	Cash Price Per Doz.
1138	3/16 in.	\$0.03
1139	7/32 in.	.04
1140	1/4 in.	.05
1141	9/32 in.	.08
1142	5/16 in.	.12
1143	3/8 in.	.15
1144	7/16 in.	.18
1145	1/2 in.	.24
1146	9/16 in.	.28
1147	5/8 in.	.30
1148	11/16 in.	.35
1149	3/4 in.	.50
1150	7/8 in.	.75
1151	1 in.	.90

FIRST QUALITY FILES.

Complete with Handle

When ordering, specify whether smooth, medium or rough files are wanted. When no specification is stated, we furnish medium.



1152

No.	Style.	Length.	Cash Price.
1152	Flat or 1/2 round	4 in.	\$0.09
1153	Taper or 3 corner	4 in.	.08
1154	Square	4 in.	.06
1155	Round	4 in.	.06
1156	Flat or 1/2 round	6 in.	.10
1157	Taper or 3 corner	6 in.	.08
1158	Square	6 in.	.07
1159	Round	6 in.	.07
1160	Flat or 1/2 round	8 in.	.12
1161	Taper or 3 corner	8 in.	.10
1162	Square	8 in.	.08
1163	Round	8 in.	.08
1164	Flat or 1/2 round	10 in.	.15
1165	Taper or 3 corner	10 in.	.12
1166	Square	10 in.	.10
1167	Round	10 in.	.10

FILE HANDLES.

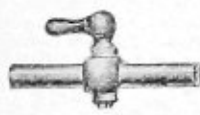
Made of wood, end feruled to prevent splitting.

No. 1168. Regular Price,

5c. Cash Price, 3c.



1168



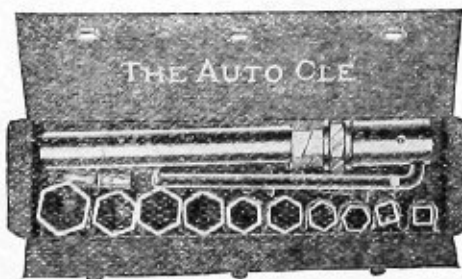
584

GENERATOR GAS TUBE COCK.

Made of brass. Can be used with copper tube or rubber tube.

No. 584. List Price, 25c. Cash Price, 12c.

REGULAR SIZE "AUTO CLE."

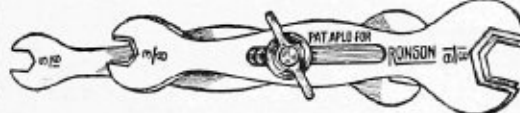


1106

Contains 10 sizes of sockets: Hexagon 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8. Square, 1/4, 5/16, 3/8. Ratchet handle, Universal joint, extra bar, etc.

No. 1106. Regular Price, \$10.00 Cash Price, \$6.00.

THE "RONSON" WRENCH. (Patented.)



1110

in which an open wrench can be of service, while en route.

Moreover, a single moment's adjustment permits of the members being taken apart, each member then forming a perfect double-end wrench itself.

The wingnut and bolt are drop forged, and the latter is provided with a squared shank, making it impossible for the members to turn once the wrench is set.

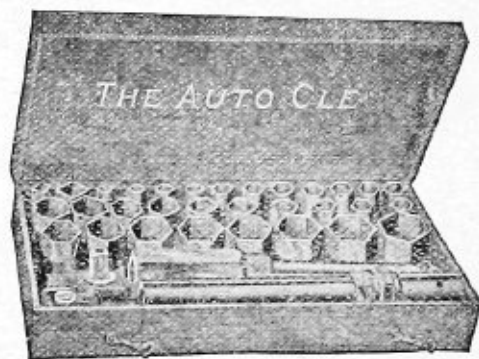
To prepare for use, pull out the head with the sized opening required, set the wingnut, and the rest of the members then form a solid and well-shaped handle, providing immense leverage.

Apart from its lightness and compactness, permitting this wrench to be easily carried in the vest pocket, the thinness and great tensile strength on the members fills a want that no other wrench in the market takes care of, namely, in tightening nuts and bolts in inaccessible places, which before could only be done at the expense of lacerated fingers.

The wrench is beautifully finished in incorrodible nickel, and replaces tools that would weigh many pounds, take up a great deal of place, cost many times its price, and that without properly coping with the requirements. It should be found in the tool kit of every man who has to deal with nuts and bolts.

No. 1110. For the set, Cash Price, 74c.

EXTRA LARGE SIZE "AUTO CLE."



1105

Contains 30 styles of sockets.

Hexagon, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 13/16, 7/8, 15/16, 1, 1 1/16, 1 1/8, 1 3/16, 1 1/4, 1 5/16, 1 3/8, 1 7/16, 1 1/2, 1 9/16, 1 5/8 in.

Square, 1/4, 5/16, 3/8 in. Ratchet handle, Universal joint, extension bar, etc.

No. 1105. Regular Price, \$12.00. Cash Price, \$9.00.

The "Auto Cle" is a ratchet wrench set having a universal joint and a full line of sockets made of pressed steel which fit every nut and bolt of an automobile. The ratchet can be changed to work in either direction by simply slipping the ring up or down on the face of the ratchet, and if desired the wrench can be made rigid in action by placing the ring between the two ratchets, thus allowing the use of the wrench in the most confined places. The "Auto Cle" reaches the most inaccessible parts of the automobile, avoiding the necessity of getting into unnatural positions. Made in two size sets as described herewith.

POLISHING CLOTHS.

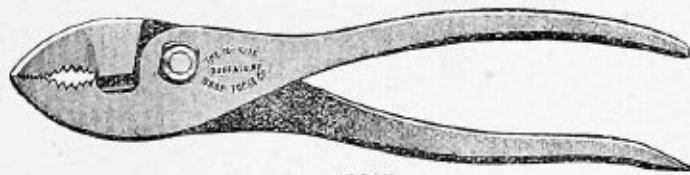


1173

Put up in packages of 1 lb., containing an assortment of special cloths. This package is specially adapted for automobile use and can be carried in the tool box when touring.

No. 1173. Regular Price, 50c. Cash Price, 19c.

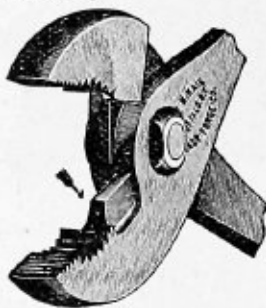
McKAIG'S COMBINATION SURE CUTTER AUTO PLIERS



3045

We call them Sure Cutters because they "sure are." When the cutters on other pliers get worn and dull they won't cut, but these will cut perfectly, no matter how dull the edges. When the bolt gets loose in other pliers, they won't cut but these pliers keep right on cutting just the same if the bolt is loose. They are the best pliers we have ever seen; 7½ inches long, made from drop forged tool steel, highly nicked finish. Every pair guaranteed.

No. 3045. Regular Price, 75c. Cash Price, 45c.



3046

PERFECT HANDLE SOLID BAR DROP FORGED STEEL SCREW WRENCHES. BEST QUALITY. THE BEST WRENCH MADE.



2265

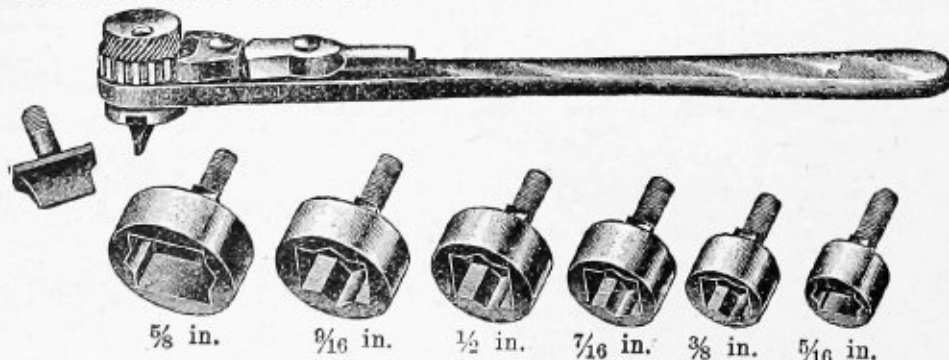
The only Screw Wrench with the Bar, an Entire Steel Drop Forging. The Strongest, Most Practical, Most Comfortable, Most Saleable Wrench Made. We Will Guarantee the Quality and Workmanship Against Any Other Wrench.

No.	Size.	Regular Price.	Cash Price.
No. 3053	6 in.	\$0.75	\$0.50
No. 3054	8 in.	.85	.50
No. 3055	10 in.	1.00	.65

LANE'S RATCHET SCREW-DRIVER AND WRENCH SETS. No. 3.

Length, 7 inches.

For Use in Close Quarters that Cannot be Reached by the Ordinary Tools Now in Use. MATERIAL. All parts of the tool are drop forged from materials best suited for the various parts for which they are intended. The screw-driver bits are made from the best quality of tool steel.



2262

FINISH. The handle, wrench sockets, cam, and socket holder are heavily nickel plated, while the ratchet gear, pawl, and knurled screw cap are blued steel finish.

Set No. 3 consists of one Handle and Ratchet, with two Screw Driver Bits, sizes ⅜ in. and ½ in., and six Wrench Sockets for square and hexagon nuts, sizes 5-16 in., ¼ in., 7-16 in., ½ in., 9-16 in., and ⅝ in. Neatly packed in a hinged box; each socket fitted in a special rack.

No. 2262. Regular Price, \$3.50 Set. Cash Price, \$2.19.

McKAIG'S ADJUSTABLE WRENCH

The simplest and finest wrench of this type on the market. Fits hexagon or square nuts and is made from drop forged steel. Light weight and durable. Every wrench fully guaranteed.

Size.	Regular Price.	Cash Price.
No. 3046	6 in.	\$0.75
No. 3047	8 in.	1.00
No. 3048	10 in.	1.25

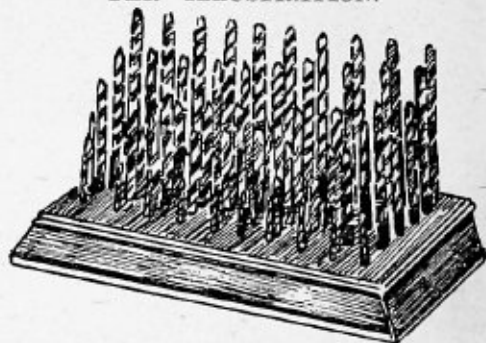
BEST FORGED STEEL COMBINATION SLIP JOINT PLIERS BEST QUALITY



2260

No.	Size.	Reg. Price.	Cash Price.
No. 3056	8 in.	\$0.75	\$0.39
No. 3057	10 in.	1.00	.45

H. J. BROWN CO.' SET OF STEEL WIRE DRILLS, ON WOOD BLOCK, AS PER ILLUSTRATION.



2259

60 Drills, from 1 to 60 Gauge. No. 2259. Regular Price, \$9.00. Cash Price, \$3.75.

WILCO BLACK LAC ENGINE PAINT



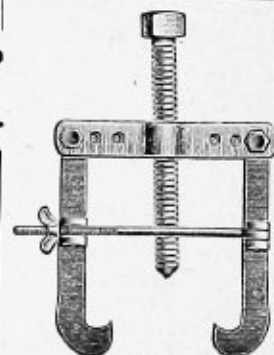
2138

This is a specially prepared heat proof paint for coating engine cylinders and gives that rich dull black finish seen on foreign cars.

No. 2138. 8 oz. can. Reg. Price, 50c. Cash Price, 35c.

BEST GEAR AND WHEEL PULLER

For removing gears, cams, couplings, pulleys and small wheels where diameter of object does not exceed 8 inches at spot where arms take hold. Arms, after being set ready for pulling, are securely locked in place by swing cross bar.



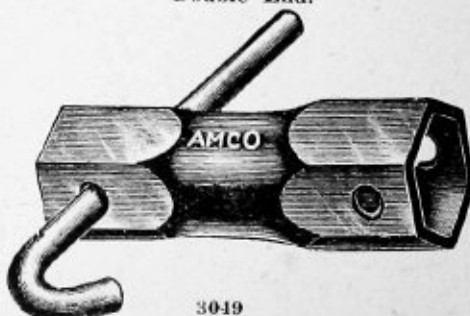
3051

No. 3051. Regular Price, as shown in cut, \$4.50. Cash Price, \$3.75.

No. 3052. Regular Price, without swinging cross bar, \$3.50. Cash Price, \$2.75.

Size. Extreme length, 7 inches; extreme length of arms, 6½ inches; cross bar, 6½ inches. Weight, 4 pounds.

AMCO SPARK PLUG WRENCH. Double End.



3049

Fits three sizes and handle can be removed. Finished in Aluminum or Nickel plated, highly polished.

No. 3049. Aluminum Finish. Cash Price, 15c. No. 3050. Nickel Finish. Cash Price, 25c.

MOSSBERG SOLVES THE WRENCH PROBLEM THAT ALL AUTOMOBILISTS HAVE BEEN UP AGAINST.

HERETOFORE, IF YOU HAD A CERTAIN NUT OF A SPECIAL SIZE IN A DIFFICULT PLACE, THAT YOU COULD NOT GET AT WITH AN ORDINARY WRENCH, THE ONLY WAY TO GET THE PROPER SIZE SOCKET WRENCH YOU WANTED WAS TO BUY A COMPLETE SET. WE ARE NOW ABLE TO SELL YOU A COMPLETE SOCKET WRENCH SET OF THE HIGHEST POSSIBLE GRADE AT A LOWER PRICE THAN OTHERS ASK FOR THE CHEAPEST CAST IRON GOODS OFFERED FOR THE SAME PURPOSE. OR, WE CAN SELL YOU STRAIGHT OR OFFSET SOCKET WRENCHES SEPARATE, AND SEPARATE SOCKETS (TO FIT EITHER SOCKET WRENCH) OF ANY DESIRED SIZE AT THE LOW PRICES QUOTED BELOW.

MOSSBERG SOCKET WRENCH SET No. 6.

982

The handy, convenient wrench for automobiles, motor boats, gas engines, pumps and other light machinery.

Its length makes it convenient for use in places difficult of access, and the length of the handle furnishes ample leverage.

One folding handle.

Two sizes of screw driver bits.

Seven sizes of hexagon pressed steel sockets, as follows: 17/32 in., 19/32 in., 21/32 in., 23/32 in., 13/16 in., 29/32 in., 1 3/32 in., fitting set screws, bolts and nuts in general use.

Special spark plug socket, 29/32 in. x 4 in. As a part of the tool equipment for special machines this set may be furnished with any required assortment of seven sizes sockets.

No. 982. List Price, complete in wooden box, \$2.50. Cash Price, \$2.00.

Extra sockets, any size listed, see below.

No. 983. Extra screw driver bits, 12c. each.

MOSSBERG PRESSED STEEL SOCKETS.

Nickel-plated Finish.

Hex. Sizes.

5/16", 11/32", 3/8", 13/32", 7/16", 15/32", 1/2", 17/32",
9/16", 19/32", 5/8", 21/32", 11/16", 23/32", 3/4", 25/32",
13/16", 27/32", 7/8", 29/32", 15/16", 31/32", 1", 1 1/32",
1 1/32", 1 5/32", 1 9/32".

Square Sizes.

13/32", 17/32", 21/32".



984

985

Of special importance is the use of this wrench for the removal or insertion of spark plugs. For this purpose there are provided special spark plug sockets fitting standard plugs.

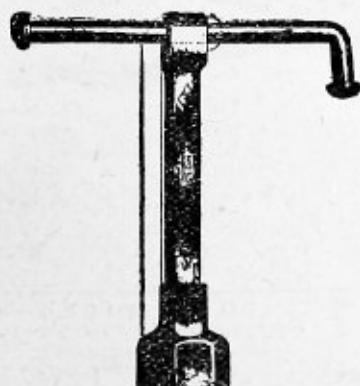
Special hexagon spark plug sockets:

29/32 in. hexagon 4 in. long.

1 1/8 in. hexagon 4 in. long.

No. 984. Cash Price of any size socket, 15c.

No. 985. Cash Price of spark plug socket, 20c. For all size spark plugs.

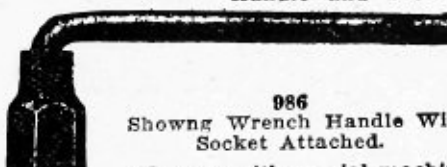
985
Spark Plug
Socket.**MOSSBERG SOCKET WRENCH WITH FOLDING HANDLE.**

987

MOSSBERG OFFSET SOCKET WRENCH. Fit Any Mossberg Pressed Steel Sockets.

986

Showing Wrench
Handle and Socket.



986

Showing Wrench Handle With
Socket Attached.

For use with special machines, shaft collars, couplings, clutches, etc.; this wrench may be supplied with a selected assortment of sockets.

If desired, and when no interchangeability of sockets is needed, the handle can be supplied with any required socket firmly affixed. Made of steel 7 in. long, 1/2 in. diameter. Strong and serviceable.

No. 986. Price of socket wrench handle only, List Price, 50c. Cash Price, 30c.

COPPER SOLDERING IRONS.

988

Regular standard weights, sizes and material.

No.	Weight.	Regular Price.	Cash Price.
988	1/2 lb.	\$0.35	\$0.20
989	3/4 lb.	.50	.30
990	1 lb.	.75	.40

HALF AND HALF BAR SOLDER.

991

No. 991. In 1 lb. bars. Very best quality. Regular Price, 60c. Cash Price, 30c.

"NOKORODE" SOLDERING PASTE.

A reliable and economical fluxing compound. No work too delicate and none too rough. Absolutely non-corrosive. Will solder all metals, except aluminum. Always ready for use. Tin can contains 2 oz. of paste.

No. 992. Regular Price, 25c. Cash Price, 12c.

INDISPENSABLE TO AUTOMOBILISTS

3059

Solderall will solder all metals except aluminum. No acid and no iron necessary.

It is a complete solder and non-corrosive. Flux combined in paste form. With the aid of a match a perfect joint can be made.

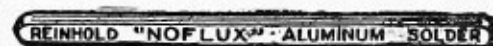
No. 3059. Cash Price, 25c.

STRIP SOLDER.

1006

A handy thing for leaky tanks or bad battery connections.

No. 1006. 1/4 lb. package. Cash Price, 12c.

ALUMINUM SOLDER.

1006A

Found at last! Practical, technical and a commercial success.

Solders aluminum to aluminum perfectly, without using a flux.

No. 1006A. Small size Noflux Solder. List Price, 25c. Cash Price, 20c.

No. 1007A. Large size. List Price, 50c. Cash Price, 39c.

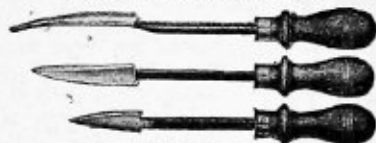
No. 987. Will fit any Mossberg sockets. For wrench only, Cash Price, 45c.

CARBON SCRAPERS.

1039

No. 1039. Set of 3 carbon scrapers, Cash Price, 35c.

Designed for use in removing soot from the top of a piston without taking off the head of cylinder. Made of $\frac{1}{4}$ in. crucible steel. Hand forged. With applewood handle.

BEARING SCRAPERS.

1040

Are made of extra fine steel, hardened and fitted with a durable handle. Being hollow ground, they are easily sharpened and cut with little effort. Point is slightly bent for cutting oil grooves. Will cut hardest bearings.

No. 1040. Bearing scrapers, set of 3. Cash Price, 65c.

HERCULES VALVE LIFTER.

1041

An effective valve lifting device. By means of the compound action, the stoutest spring is easily raised, by a turn of the wing nut.

No. 1041. Hercules Valve Lifter, Cash Price, 65c.

EXTRA LONG CARBON SCRAPER. SUPERIOR QUALITY.

2292

Wood handles Riveted on; cannot pull off. They are 19 inches long, made of the Highest Grade Octagon Steel.

No. 2292. Regular Price, \$1.00. Cash Price, 55c.

MECHANICS' BALL BEARING DRILLS. HIGHLY POLISHED. REGULAR SLEEVE. ADJUSTABLE. BEST QUALITY.

2293

Holds Round or Square Shank Drills 1-16 to $\frac{1}{2}$ inch Shank.

For Drilling Iron, Brass or any other hard metals.

No. 2293. Regular Price, \$2.50. Cash Price, \$1.35.

MACHINISTS' BALL PIEN HAMMER.

1044

Billings and Spencer hammers are superior to any other make. Drop forged, case-hardened heads, seasoned hickory handles, carefully turned and balanced.

No.	Weight.	Regular Price.	Cash Price.
1044	8 oz.	\$1.00	\$0.35
1045	12 oz.	1.25	.40
1046	16 oz.	1.50	.50

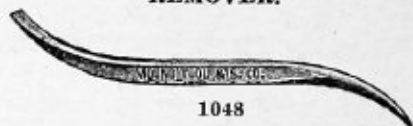


1042

SPOOL WIRE.

Soft copper wire, handy in a thousand ways; put up in $\frac{1}{4}$ lb. spools. 18, 20 and 22 gauge.

No. 1042. Cash Price, 12c.

FINEST QUALITY COTTER PIN REMOVER.

1048

The handiest tool ever invented. A necessity for removing cotter pins, and can be used for various purposes in automobiles. Forged from tool steel. Polished.

No. 1048. Regular Price, 25c. Cash Price, 10c.

The Only Cotter Setter.

3060

For inserting cotter pins in places impossible to reach with pliers, etc. No need to leave out cotter pins that are difficult of access and take chances of losing nut or bolt, which might cause a serious accident.

No. 3060. Regular Price, 75c. Cash Price, 35c.

TEN-IN-ONE WRENCH.

3061

This is a tool that can be used in any position and in very small and narrow places. It is really ten wrenches in one and a very handy tool for the house as well as for the Auto as it combines a number of instruments that you often have use for.

No. 3061. Regular Price, 25c. Cash Price, 15c.

PERFECT HANDLE HAMMER

1047

The strongest and most practical hammer made. One solid piece drop forged steel. Wood handles countersunk in the metal. Highly polished. Undoubtedly the best hammer made. Weight 16 $\frac{1}{2}$ oz. Length, 10 in.

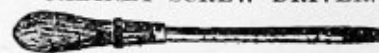
No. 1047. Regular Price, \$1.00. Cash Price, 59c.

OFF-SET DOUBLE-END SCREW DRIVERS.

1067

These screw drivers are made specially to get at screws where a straight tool cannot be used. Forged from tool steel, $\frac{1}{4}$ in. square. Highly polished.

No.	Length.	Regular Price.	Cash Price.
1067	5 in.	\$0.30	\$0.19
1066	6 in.	.35	.24
1068	8 in.	.50	.28

CABINET SCREW DRIVER.

1069

Made specially for fine, delicate work, the blades being round and slender. Drawn from Bessemer steel, known as the highest grade steel. Adapted for light work.

No.	Length of Blade.	Regular Price.	Cash Price.
1069	2 in.	\$0.25	\$0.07
1070	3 in.	.30	.08
1071	4 in.	.40	.10
1072	5 in.	.50	.12
1073	6 in.	.60	.15

PERFECT HANDLE SCREW DRIVER.

1060

Positively the strongest screw driver made. The body is one solid piece of drop forging. The wood handle is countersunk in the metal. The ideal tool for heavy service.

No.	Length of Blade.	Regular Price.	Cash Price.
1060	2 in.	\$0.40	\$0.20
1061	3 in.	.40	.20
1062	4 in.	.40	.20
1063	6 in.	.50	.30
1064	8 in.	.70	.35
1065	10 in.	.85	.50

FAN BELTING.

Made of Piano Wire.



1003

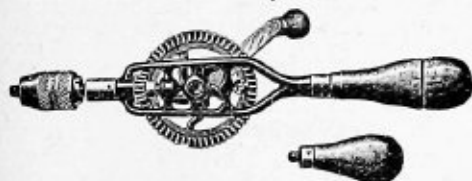
Steel Belting. Coiled wire with patent connecting ends, for pumps, oilers, fans, etc.

No.	Size.	Regular Price.	Cash Price.
1003	1/4 in.	\$0.75	\$0.15
1004	5/16 in.	.85	.20
1005	3/8 in.	1.00	.30

We supply steel belts, 24, 28, 32, 36 in. State length desired.

MILLERS FALLS HAND DRILLS.

STANDARD BEST QUALITY GOODS.



2285

These Drills are provided with Chucks having three jaws resting in solid sockets. There are no springs to get out of place or out of order. The Chucks are Nickled and the handles Cocobolo. Including 8 Drills, from 0 to 3-16.

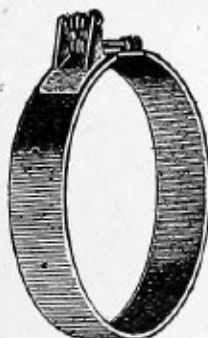
A side handle, as shown in cut, is furnished with this Drill.

No. 2285. Regular Price, with 8 Drills, \$2.50. Cash Price, \$1.35.

"MOTORBESTOS"

BRAKE BAND LINING

Positively Will Not Burn.



Made to meet the demand for the heaviest cars which generate intense heat in the brakes. Of a special composition that is guaranteed to last 20,000 miles. Adopted by the leading manufacturers.

No. 1015.

Thick-ness.	Widths											
	1 in.	1 1/4 in.	1 1/2 in.	1 3/4 in.	2 in.	2 1/4 in.	2 1/2 in.	3 in.	4 in.	5 in.	6 in.	8 in.
1/8 in.	\$.32	\$.36	\$.40	\$.46	\$.52	\$.58	\$.64	\$.74	\$.92			
5/32 in.	.36	.42	.48	.56	.64	.72	.80	.94	1.20			
3/16 in.	.42	.50	.58	.68	.76	.84	.94	1.12	1.44			
1/4 in.	.56	.66	.76	.88	1.00	1.12	1.24	1.46	1.88			

Cash Discount, 40 per cent. off above prices.

HACK SAW BLADES.



1019

These blades, made from the finest quality of steel, by new and improved methods, procure for the user the uniformity and lasting qualities that are the essential features of a good hacksaw blade.

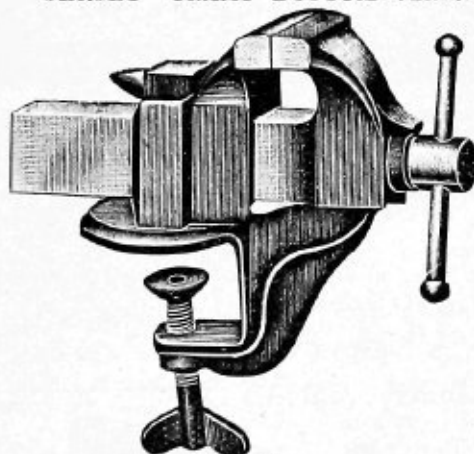
No. 1019B. For use on cast steel or such hard metals. 16 teeth to in.

No. 1019C. For brass and steel tubing and stringy metals. 24 teeth to in.

Length of blade, 8 in., 10 in., 12 in.

All sizes. Cash Price, 5c each.; dozen, 40c.

"JERSEY" CLAMP BOTTOM VISES.



1035

The finest, most complete line of vises, adapted for light work, ever offered at reasonable prices. They are a thoroughly well-made vise; one that will work when you want it to and gives satisfaction while in use. The jaws are polished, body finished in brown baking Japan.

Each vise is wrapped and tied so they will always open fresh and clean.

No.	Mfrs. No.	Width of Jaws.	Weight Lbs.	Regular Price.	Cash Price.
1035	40	1 1/4 in.	3	\$1.00	\$0.60
1036	44	2 in.	3 1/2	1.50	.90
1037	48	2 1/2 in.	5	2.00	1.35
1038	52	3 in.	3 3/4	3.00	1.95

CRANE PULLER.



1020

No.	Price.
1020—No. 2 with one set of arms.....	\$7.20
1021—No. 3 with one set of arms.....	9.00
1023—Extra arms for No. 3.....	2.50
1024—Extra arms for No. 2.....	1.50

ADJUSTABLE HACKSAW FRAMES.



1018

Nickel adjustable frames, black hardwood handle, takes 8, 9, 10, 11 and 12 in. blades. One blade in each frame.

No. 1018. Regular Price, \$1.00. Cash Price, 55c.

ASBESTOS WOVEN METALLIC SHEET PACKING.

For making gaskets for cylinders, etc.

The only reliable flat packing for gasoline engines. Made of asbestos interwoven with copper wire. Will withstand oil, grease, water and excessive heat. Used exclusively by the leading manufacturers.

No.	Size of Sheet.	Regular Price.	Cash Price.
1032	6x20	\$0.75	\$0.35
1033	12x20	1.25	.70
1034	18x20	2.00	1.00

GRAY'S CLUTCH COMPOUND.



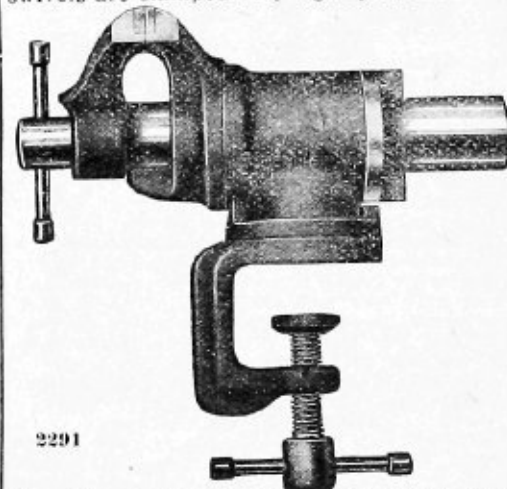
1031

Can be used on clutches, brake bands, etc. By pouring some of the compound on the leather, it will become sticky, preventing the clutch or brake from slipping. Put up in tin can, holding one pint.

No. 1031. Regular Price, 50c. Cash Price, 35c.

THE AUSTRALIAN VISE.

The Jaws and both Swivels Clamped with one operation of the lever. Can be quickly adjusted to any position or angle. Both swivels are clamped very tightly at the same

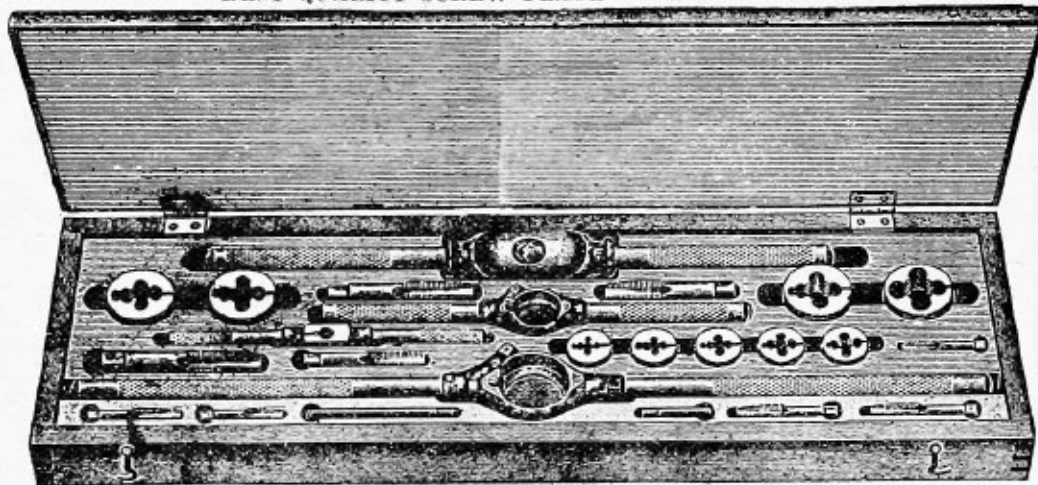


2291

time the work is clamped between the jaws, and the work would be dislodged from between the jaws before the swivels would move from their position. Jaws are Steel Faced and Tempered. All finished parts are Nickled. Width of Jaws, 2 in.; open, 2 in.; weight, 7 1/2 lbs.

No. 2291. Reg. Price, \$8.50. Cash Price, \$4.00.

BEST QUALITY SCREW PLATE SETS



3062

Polished Cabinet, size $34\frac{1}{2} \times 11 \times 3\frac{1}{4}$ inches. Containing five $1\frac{5}{16}$ -inch Dies with guides, six $2\frac{3}{16}$ -inch Dies with collits, taps and screw driver. Two Tap Wrenches and two Die Stocks mottled finish with knurled handles.

Cutting eleven sizes, $1/4$, $5/16$, $3/8$, $7/16$, $1/2$, $9/16$, $5/8$, $11/16$, $3/4$, $7/8$ and 1 inch.

No. 3062. Regular Price, \$25.00 Cash Price, \$18.75.

Can furnish in either A. L. A. M. or U. S. S. Thread, be sure to mention what Thread you desire.

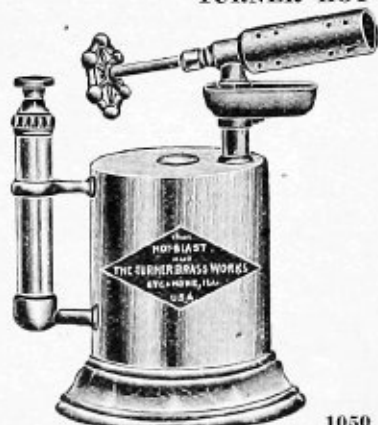
No. 3065. Polished Cabinet, size $19\frac{1}{4} \times 6\frac{1}{4} \times 2\frac{1}{2}$ -inch. Containing six $1\frac{5}{16}$ -inch Dies with Collits, Taps and Screw Driver. One Tap Wrench and one Die Stock mottled finished with knurled handles.

Cutting six sizes, $3/16$, $1/4$, $5/16$, $3/8$, $7/16$ and $1/2$ -inch.

No. 3065. Regular Price, \$12.50. Cash Price, \$9.75.

Can furnish this set in either A. L. A. M. or U. S. Standard Thread. Be sure to mention which Thread you desire.

TURNER HOT BLAST GASOLINE TORCHES



1050

For those who require a torch with an automatic pump, we can recommend our No. 1050 as giving the best service of any torch with this style of pump. Our automatic spring valve pump forms a part of the handle and is made with all the up-to-date improvements. The tank is 18 gauge heavy brass, with brass funnel-shaped bottom and fitted with our new non-leaking filler plug. The burner is of the improved closed generator type for either outdoor or inside use. Jobbers sell at factory prices.

Our new Non-Leaking Filler Plug is furnished with this Torch.

POLISHED BRASS

Capacity one quart
Height, over all $9\frac{1}{2}$ inches
Diameter 4 inches
Net weight 3 lbs.
Consumption $\frac{1}{2}$ pint per hour

We Include Attachments.

For holding Soldering Copper with each Torch without additional charge. They are packed loose and can be applied easily and securely to the burner.

No. 1050. Reg. Price, \$5.00. Cash Price \$2.75.



1057

For many years we have made and sold this torch, and the trade has found it very popular. It is especially designed for automobile users and mechanics where a good tool is required and of the smallest dimensions. Less than two inches in diameter; equipped with metal spring attached to bottom to prevent tipping over. Our improved Automatic Pump forms the handle. This is an excellent torch for outdoor use and every mechanic and automobile user should have one in his outfit.

Our New Non-Leaking Filler Plug is Furnished with this Torch

POLISHED BRASS

Capacity one pint
Height, over all 9 inches
Diameter $1\frac{1}{4}$ inches
Net weight 3 lbs.
Consumption $\frac{1}{4}$ pint per hour

We Include These Attachments.

For holding Soldering Copper with each Torch without additional charge. They are packed loose and can be applied easily and securely to the burner.

No. 1057. Reg. Price, \$6.00. Cash Price, \$3.49.



3063

Polished Cabinet, size $26\frac{1}{4} \times 8\frac{1}{4} \times 2\frac{3}{4}$ inches, containing five $1\frac{5}{16}$ -inch Dies with guide, two $1\frac{3}{4}$ -inch Dies with collits, taps and screw driver. One Tap Wrench and two Die Stocks mottled finish with knurled handle.

Cutting seven sizes, $1/4$, $5/16$, $3/8$, $7/16$, $1/2$, $5/8$ and $3/4$ inch.

No. 3063. Regular Price, \$15.00. Cash Price, \$11.75.

Can furnish in either A. L. A. M. or U. S. Thread, be sure to mention what Thread you desire.

In Polished Cabinet $8 \times 6\frac{1}{4}$ -inch containing nine $1\frac{5}{16}$ -inch Dies, Taps, stock and Tap Wrench.

Cutting nine sizes, $1/16$ 72, $3/32$ 56, $1/8$ 32, $5/32$ 32, $3/16$ 24, $7/32$ 24, $1/4$ 20, $9/32$ 20, $5/16$ 18.

No. 3064. Regular Price, \$10.00. Cash Price, \$5.75.

TINNERS' SNIPS.



1016

Nickel-plated steel laid blades, extra heavy. Each one guaranteed in every way. Forged from solid steel and laid full length of cutting surface with finest cutley steel.

No.	Length.	Regular Price	Cash Price.
1016	12 $\frac{1}{2}$ in.	\$1.50	\$0.75
1017	14 in.	2.50	1.25



3066

SOLDERALL BLOW TORCH

This Pocket Solderall Blow Torch is a handy, compact, self-acting, alcohol Blow Torch. It will throw a hot pointed flame three to four inches long in any direction desired. It is clean, leaves no soot and will not explode.

Indispensable for electricians, jewelers, mechanics, automobilists, painters, campers, sportsmen and householders and is a necessity for a thousand and one uses, such as soldering, vulcanizing, melting metals, removing paints, heating food, etc., etc.

No. 3066. Regular Price, \$1.00. Cash Price, 55c.

THE MOST DESIRABLE ASSORTMENT OF SPARK PLUGS AT AN ENORMOUS CUT IN PRICE.



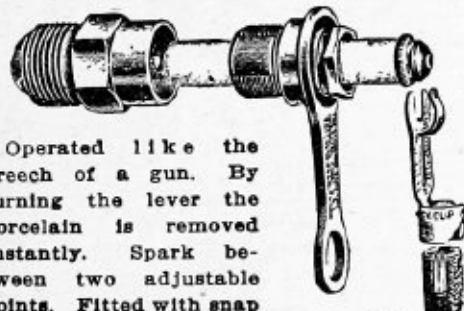
RELIANCE SPARK PLUG.
No. 1268. All sizes. List Price, \$1.25. Cash Price, 85c.



LONG TYPE RELIANCE SPARK PLUG.
No. 1269. All sizes. List Price, \$1.25. Cash Price, 85c.

"BREECH-BLOCK" SPARK PLUG.

Opened and Cleaned in 10 Seconds.



Operated like the breech of a gun. By turning the lever the porcelain is removed instantly. Spark between two adjustable points. Fitted with snap terminal.

1277

No.	Size.	Regular Price.	Cash Price.
1277	1/2 in.....	\$2.00	\$1.05
1278	Metric		
1279	A. L. A. M.....		

"SIMMS-BOSCH" MAGNETO SPARK PLUG.

Made by the Bosch Magneto Manufacturers.



1280

Especially suitable to be used with Bosch High Tension Magneto and especially designed by the Bosch Magneto people. Made with stone lava insulation.

No.	Size.	Regular Price.	Cash Price.
1280	1/2 in.....	\$1.00	\$0.75
1281	Metric		
1282	A. L. A. M.....		

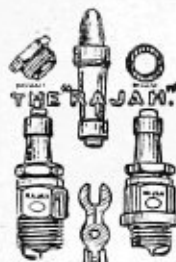
THE MEZGER SOOT-PROOF PLUG.



1287

Do not be misled by other so-called soot-proof imitations, but call for the genuine Mezger Soot-Proof Plug.

No.	Size.	Regular Price.	Cash Price.
1287	1/2 in.....	\$1.00	\$0.40
1288	Metric		
1289	A. L. A. M.....		



1283

"RAJAH" SPARK PLUG.

The Plug that Never Falls.

We can highly recommend the "Rajah." It never fails to give satisfaction and is used by thousands of autoists.

Simple in construction, easily taken apart and cleaned.

Used with clip terminal only.

Made in 1/4 in. standard, metric.

No.	Plug	Regular Price.	Cash Price.
1283	Extra porcelain	\$1.50	\$0.75
1284	Gaskets, doz.	.50	.35
1285	Gaskets, doz.	.25	.15
1286	Clip terminal, each	.10	.06
No. 1286A. "Rajah" Plug, A. L. A. M.			
List Price \$2.00. Cash Price, 90c.			

RELIANCE SPARK PLUG.

A Hot Spark in Water, Oil or Grease.



1290

Practical tests have proven that you can place absolute "Reliance" on this plug. Positively proof against soot, oil, carbon or any combination that tends to prevent a spark plug sparking at all times.

No.	Size.	Regular Price.	Cash Price.
1290	1/2 in.....	\$1.00	\$0.75
1291	Metric		
1292	A. L. A. M.....		

SPLITDORF "COMMON-SENSE" PLUG.

A New Successful Spark Plug.



1299

Will outlast your motor. The illustration above describes in detail the many features in the Splitdorf "Common-Sense" Spark Plug.

No. 1299. 1/2-inch thread. Cash Price, 65c.
No. 1299A. A L A M Thread or Metric. Cash Price, 70c.



1300

MICA BACK RELIANCE SPARK PLUG.

No. 1300. All sizes. List Price, \$1.25. Cash Price, 90c.

JEWEL MICA SPARK PLUG.



1293

The Jewel Spark Plug is constructed with a mica core, which is formed with a double insulation of pure mica pressed around the central electrode of solid steel. Made in all sizes and are guaranteed.

No.	Size.	Regular Price.	Cash Price.
1293	1/2 in.....	\$2.00	\$0.75
1294	Metric		
1295	A. L. A. M.....		

THE CELEBRATED MOSLER SPIT-FIRE PLUG.



1301

They actually "spit fire," while others spark only. Energetic ignition, greater power. Base acts as condenser of electricity, facilitates sparking, makes plugs spit fire, protects insulation and sparking joints.

No.	Size.	Regular Price.	Cash Price.
1301	1/2 in.....	\$1.50	\$0.75
1302	Metric		
1303	A. L. A. M.....		

MOSLER "SPIT-FIRE" MAGNETO SPARK PLUG.

The Best Magneto Plug Made.

The construction and design is the same as the regular well-known Mosler "Spit-Fire" Spark Plug, with the exception of the firing point, which is heavy platinum and will stand hotter explosion, therefore particularly adaptable for use with magnetos.

No.	Size.	Regular Price.	Cash Price.
1296	1/2 in.....	\$2.00	\$1.00
1297	Metric .....	.2.00	1.00
1298	A. L. A. M.....	.2.50	1.25

RED HEAD SPARK PLUG



Fifty thousand were given away free by the makers to prove how good they were. They now have an enormous sale.

No.	Size.	Cash Price.
1311	1/2 in., porcelain	50c.
1312	Metric	
1313	A. L. A. M...	

Mica or porcelain plugs, same price.

Red Head Plug Parts.

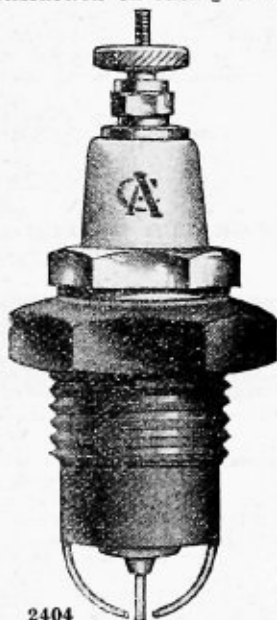


No.	Size.	Cash Price.
1314	Porcelain, completely assembled	\$0.60 \$0.40
1315	Bushing nut	.10 .08
1316	Shell with copper washer	.35 .25
1317	Mica core, complete	.60 .40
1318	Buick terminal	.05 .04

"OUR CUT RATE PRICES IS LIKE PICKING UP MONEY."

THE A. C. SPARK PLUG.

The A. C. Spark Plug will not leak and it will not soot. It will throttle an engine down lower than any other plug made. The A. C. is a magneto as well as a battery plug. Winner of all the big races won by Chrevolet, Burman and Oldfield. The only plug giving perfect satisfaction on racing cars.



No.	Size.	Regular Price.	Cash Price.
2404	1/2 in.	\$1.00	\$0.55
2405	Metric	1.00	.55
2406	3/8-18 in.	1.00	.55
2407	Extra Porcelain, complete		.35

REX SPARK PLUG.

Simple construction, hot spark, soot proof with hard face Porcelain. Specially designed interchangeable Porcelain. No packing.

No.	Size.	Regular Price.	Cash Price.
No. 2408.	1/2-in.	Reg. Price, \$1.00.	Cash Price, 49c.
No. 2409.	Metric.	Reg. Price, \$1.00.	Cash Price, 49c.
No. 2410.	3/8-18 in.	Reg. Price, \$1.00.	Cash Price, 50c.
No. 2411.	Extra Porcelain, complete with wire center.	Reg. Price, 50c.	Cash Price, 25c.



2408

CADILLAC CORES.



1348

Mica cores for Cadillac. These cores are best quality compressed mica with high-grade firing point. Fit any double Cadillac plugs. No. 1348. Cash Price, pair, 59c.

SPARK PLUG BOX.

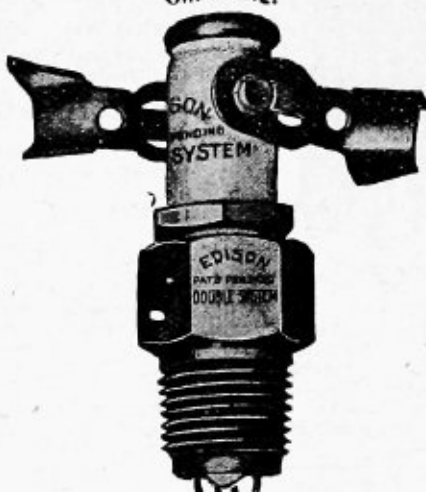
Made of wood, covered with leatherette. Holds six plugs and extra porcelains, etc. The very best thing for protecting your spark plugs. No. 1338. Regular Price, 75c. Cash Price, 40c.



1338

"EDISON" SPARK PLUG.

Double System—Magneto and Battery on One Plug.



1325

The necessity of using two sets of spark plugs is now eliminated.

Made with two terminal connections, one for magneto, the other for battery and coil. The one plug does service for both and works perfectly.

The core is made of the finest grade porcelain, through which two fine platinum wires are set before moulding to shape.

Two fine sparking parts, one on each side, is the result, each working independently. No. 1325. Any thread. Price, \$2.00. Cash Price, \$1.25.

EXTRA PORCELAIN FOR SPARK PLUGS.



1328

Every porcelain we furnish is guaranteed.

No.	Make of Plug	Regular Price.	Cash Price.
1328	Soot-proof	\$0.25	\$0.15
1329	Split-fire	.25	.15
1330	*Rajah	.60	.35
1331	Starite	.25	.15
1333	*Breech Block	.75	.50
1334	*Redhead	.60	.40

*These porcelains are sold complete with firing spindles. The others are furnished without electrode.

EXHAUST VALVE GASKETS.



1340

Special copper gaskets, lined with asbestos; used in intake and exhaust manifolds and flanges. Standard sizes in stock.

No.	Inside Measure.	Regular Price.	Cash Price.	Doz.
1340	1 to 2 in.			
1341	2 to 3 in.	\$0.30	\$0.12	\$1.39

SPARK PLUG BUSHINGS.



1346

These bushings are threaded to fit metric spark plugs inside and 1/2 in. standard American threads outside to render metric plugs available for use on machines with 1/2 in. thread.

No. 1346. 1/2 in. to metric. Cash Price, 7c.

ASBESTOS YARN PACKING.



1345

This is a two-ply asbestos yarn packing and is used for spark plugs in place of the copper gaskets. Can also be used for regular packing of any kind.

No. 1345. Spool of about 1/4 lb. Cash Price, 18c.

SOOTLESS MICA SPARK PLUG.



1307

This plug is especially adapted for use in air-cooled marine and automobile engines that use a large amount of lubricating oil, and the manufacturers claim that it will continue to do the business where all others will lay down.

No.	Size.	Regular Price.	Cash Price.
1307	1/2 in.		
1308	Metric	\$1.50	\$1.00
1309	A. L. A. M.		

RAJAH GASKETS.



1342

The Rajah Plugs require a special size copper asbestos gasket between the porcelain and shell.

No. 1342. Price, per doz., 60c. Cash Price, 15c.

No. 1343. For plugs 1/2 in. or metric size. Price, per doz., 35c. Cash Price, 15c. Add 5c. for postage.

Regular Gaskets.

No.	Inside Measure.	Regular Price.	Cash Price.	Doz.
1344	3/4 to 1 1/2 in.	\$0.10	\$0.05	\$0.40
	1 1/2 to 2 1/2 in.	.15	.06	.50
	2 1/2 to 3 in.	.20	.10	.70
	3 to 4 in.	.25	.15	.85

FIBRE PLUG HAT.

Fits Any Plug—Attached in a Minute.



1339

It will keep the plug dry, prevent short-circuiting, and insure more even running of your motor. It will also protect you from accidental contact and shock.

No. 1339. Cash Price, 25c.

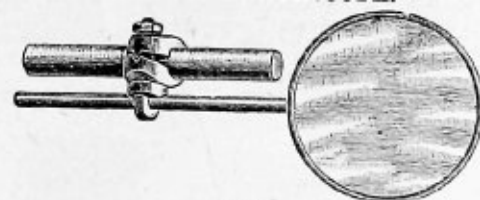
EXTRA FIRING SPINDLES FOR SPARK PLUGS.



1335

We can furnish special firing spindles made especially for spark plugs. We guarantee absolute satisfaction.

No.	Make of Plug.	Regular Price.	Cash Price.
1335	Soot-proof		
1336	Split-fire	\$0.25	\$0.1
1337	Starite		



1572

Something different and better than any before offered and is, in reality, a practical and necessary adjunct to the equipment of autos and wherever a front view of the rear is desired.

The "Acme" is optically true, and objects are not distorted in the least.

Although but a convex glass of about 4 in. in diameter, a rear view covering an area of 350x65 ft. is accurately presented, and every rear movement can be seen without turning the head.

No. 1572. Regular Price, \$5.00. Cash Price, \$2.50.

The "Mirrorscope" is a most valuable article in driving through a busy or crowded thoroughfare; it enables you to manipulate your car with the same freedom that you would use on a deserted road.

Easily attached to wind shield, body or bow. When ordering, state which clamp is desired.



REDUCING MIRRORSCOPE.

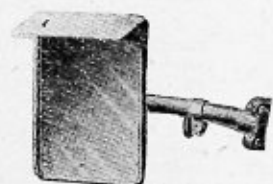
This Mirrorscope has a reducing lens of very wide angle, giving a full view of everything in the rear. It fits on to the Filling in Board on Shield or on to Dashboard.

No. 2309. Size 5 in. Regular Price, \$5.00. Cash Price, \$2.75.

2309

WILCO "MIRRORSCOPE"

See What's Coming.



1571

The mirror enables you to see at a glance the movement of all vehicles behind your car, thus often avoiding accidents. It is a special plate glass mirror bound solidly into a brass frame.

Has a ball and socket joint, making it adjustable to any position. An absolute necessity for cars having large tops or closed bodies.

Size, 6x8 inches.

No. 1571. Regular Price, \$4.00. Cash Price, \$2.75. No. 1571A. With Hood, \$2.50.

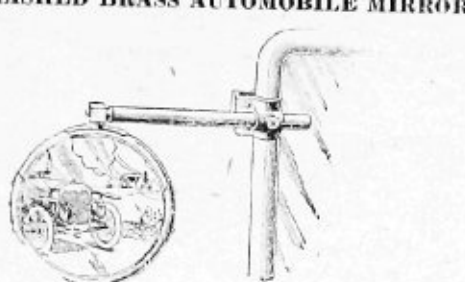
CRANK HANDLE HOLDER.



1557

Prevents handle swing while car is in motion. Also keeps it clean. Made of heavy leather. Adjustable to any size and holds handle in any position.

No. 1557. Regular Price, 50c. Cash Price, 29c.



3067

Most Up-to-Date Mirror on the Market.
Can be placed in any position. Made of heavy beveled glass mirror. Size, 5 1/4 inch. Most popular size used.
Frame can be easily taken apart.
No. 3067. Regular Price, \$3.00. Cash Price, \$1.50.



788

LUGS OR SECURITY BOLTS.

Regulation tire lug, made of steel; part that connects with tire is rubber covered.

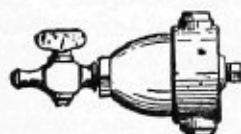
No. 788. Small size, to fit 2 1/2, 3, 3 1/2 in. tires. Price, 50c. Cash Price, 20c.

No. 789. Large size, to fit 4, 4 1/2, 5 in. tires. Price, 60c. Cash Price, 30c.

No. 790. Fitted with racing clips for 10c. extra.

1911 "BREEZE" FUEL STRAINER.

Weight, 5 1/2 Ounces.



1619

Eliminate Carburetor and Motor trouble.

Prevents dirt from entering carburetor and avoids "flooding," which is one of the chief difficulties.

An absolutely reliable device proven by actual service.

No. 1619. List Price, \$1.50. Cash Price, \$1.29.

The holes in the end are drilled to take 1/4 in. outside diameter copper tubing, which can be soldered into the ends, or a regular union nut and tube can be used.

TOP PROP NUTS FOR AUTOS

Standard for All Tops



3070

No. 3070. Black japanned, showing imitation leather stitching, size 1 1/2-inch. Price, Each, 5c.

No. 3071. Black japanned, showing imitation leather stitching, size 1 1/4-inch. Price, Each, 5c.

ALL-IN-ONE SPARK PLUGS
The "All-in-One" Spark Plug cleans itself. You save all the work of unscrewing the plug, cleaning and putting it back, if you use the "All-in-One" simply pour a little gasoline into the priming cup, open the cock, and all the soot, grease and oil is blown off. No trouble, no muss, no work.



TYPE "C"

1/2 inch standard thread, for use on engines where plug enters cylinder perpendicularly and sets into a recess.

This plug is especially designed and constructed for such motors as the Model "T" Ford and others where plug is set in a deep well or recess.

TYPE "A"

1/2 inch standard thread, for use on engines where plug enters cylinder perpendicularly on a flush surface.

TYPE "K"

3/8-18 A. L. A. M. thread, for use on engines where plug sets in cylinder perpendicularly.

TYPE "D"

1/2 inch standard thread, for use on engines where plug enters cylinder horizontally.

TYPE "M"

3/8-18 A. L. A. M.—For use on engines where the plug enters the cylinder horizontally. In the construction of this plug we use a long shank so that the priming cup will not interfere with push rods or any other obstruction on the side of the cylinder, special Model "10" Buick type.

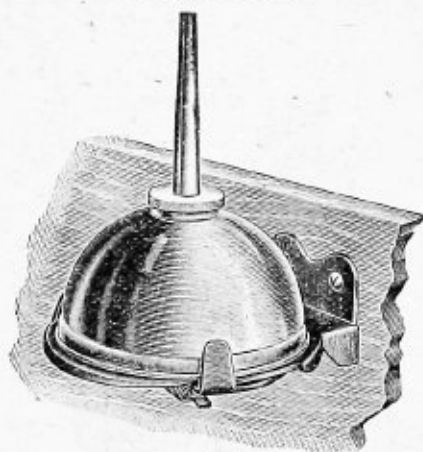
TYPE "N"—Metric thread, perpendicular.
TYPE "O"—Metric thread, horizontal.

Prices

No.	Reg. Price.	Cash Price.
2400	Porcelain Plug complete, any type or thread, each.	\$1.50 \$1.10
2401	Mica Plug complete, any type or thread, each.	1.75 1.35
2402	Extra porcelain cores assembled complete, with electrode-wire and thumb-screw, each.	.50 .40
2403	Extra mica cores assembled complete, with electrode-wire and thumb-screw, each.	.75 .60

REMEMBER WE PREPAY TRANSPORTATION CHARGES—SEE INSIDE FRONT COVER.

Holladay's Patent



2500

This holder is designed to be attached to dash of automobile, under the hood, which is the most convenient place, as it is ready for instant use for oiling motor parts. The oil is kept warm and will flow freely in coldest weather.

Made of pressed steel, copper finished.

No. 2500. Adjustable for all size cans. Regular Price, 50c. Cash Price, 12c. each.

RAJAH SNAP TERMINAL.

A stiff snap on terminal for secondary wire. Will fit any plug; easily attached and detached.

1351A

No. 1351A.

Price,

per doz., \$1.00. Cash Price, 69c. Each, 6c.

TERMINALS.



1352

1354

1353

No. 1352. A large, heavy terminal of stiff copper, long clips for secondary wire. Price, per doz., 25c. Cash Price, 12c. Add 5c. for postage.

No. 1353. A small size terminal of heavy copper for small primary wire. Price, per doz., 15c. Cash Price, 4c. Add 5c. for postage.

No. 1354. A medium size terminal of heavy copper for small primary wire. Price, per doz., 20c. Cash Price, 8c.

DOUBLE LEAD FRENCH TO PRIMARY WIRE.



This wire is very popular with all European drivers, and is less liable to short circuit than two single wires.

No.	Regular Price.	Cash Price.
1443	Per foot.....\$0.16	\$0.07

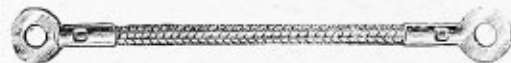


1351

Just snap them on and they won't come off, and no fastening or nuts required. It makes a perfect contact owing to the claw-shaped terminals.

No. 1351. Cash Price, 5c. each, or 45c. per box of 10.

REGULATION BATTERY CONNECTIONS.



1350

Consists of 5 in. of lamp cord, composed of several strands of copper wire, with copper terminals on each end.

No. 1350. Regular Price, 5c. Cash Price, 2c. each, or 10c. per doz.

SPARK PLUG BRUSH.

Handy for

cleaning spark

plugs or any

part of the car.

Made with

strong wire

bristles for car-

bon and grease

and hair bristles for finishing.

No. 1347. Spark plug brush. Cash Price, 12c.

PRES-CO" SPARK-PLUG BRUSH



1347

SPECIAL MAGNETO CABLE.



2423

No. 2423. Cash Price, per foot, 7c.

White rubber covered. Such as is used on Bosch and Splitdorf magnetos. It has 48 wire strands.

BROGA AUTOMATIC CURTAIN FASTENERS



Stud A

Stud B

2392

Broga Fasteners are designed with a wide and evenly distributed gripping surface of two plates which entirely eliminate any possibility of fastener tearing out of goods. When there is any wind or other strain it pulls the coil spring under shoulder of stud and automatically locks fastener in place—the harder the strain the more securely it holds, yet it operates as easily as buttoning or unbuttoning a coat. In ordering please specify which of the above studs is wanted.

No.	Reg. Price.	Cash Price.
2392. Single Fastener, per doz...	\$1.40	\$0.50
2393. Double Fastener, per doz...	2.10	.75
2394. Triple Fastener, per doz...	2.80	1.00



Made from heavy drab duck. Will hold six plugs, any make. Protects plug from rusting, porcelains from breaking.

No. 1349. Regular Price, 75c. Cash Price, 45c.

CURTAIN FASTENERS.

No. 1438. Single. Polished brass. List Price, each, 15c. Cash Price, 6c.

No. 1439. Double. List Price, each, 20c. Cash Price, 8c.

No. 1440. Triple. List Price, each, 30c. Cash Price, 10c.



1438

CURTAIN FASTENERS.

No. 1441. Double. List Price, each, 15c. Cash Price, 10c.

No. 1442. Single. List Price, each, 12c. Cash Price, 8c.



1441

RED RIB SPECIAL IGNITION CABLE.



1408

Soft drawn copper wire, covered with semi-cured India rubber and wound with special braid, which is a perfectly insulating material.

No.	Regular Price.	Cash Price.
1408 Primary, per foot....	\$0.10	\$0.03
1409 Secondary, per foot...	.15	.08

GENUINE FRENCH RUBBER CABLE.



1410

A very high-grade insulated wire, constructed of the best material known. It is perfectly pliable and guaranteed acid, oil, grease and water proof.

No.	Regular Price.	Cash Price.
1410 Primary, per foot....	\$0.16	\$0.05
1411 Secondary, per foot...	.20	.10

PACKARD STYLE CABLE.

Guaranteed as Good as Any Made.



1412

Enameled ignition cable, protected by films and braids, enameled and baked in a high heat, making permanent and reliable insulation.

No.	Regular Price.	Cash Price.
1412 Primary, per foot....	\$0.12	\$0.06
1413 Secondary, per foot...	.25	.10

REMEMBER WE PREPAY TRANSPORTATION CHARGES—SEE INSIDE FRONT COVER.

MASTER VIBRATOR

The Finest Made.
Suitable for Any Car



Guaranteed for year. Made by N. Y. Coil Co.

This Master Vibrator is designed especially for Ford cars, and was original with us several years ago.

It consists of a specially designed Vibrator and powerful Condenser enclosed in a highly finished mahogany case which is simply connected in series with the regular coil. This instrument interrupts the current, or, in other words, becomes the Master Vibrator for all four coils, insuring uniform and perfectly timed ignition from each coil—a condition not possible to obtain with four separate vibrators. It will therefore be seen that but one adjustment is necessary, and that three pairs of contact points are dispensed with, reducing your ignition system to the simplicity of a single-cylinder car, at the same time increasing speed, power and flexibility.

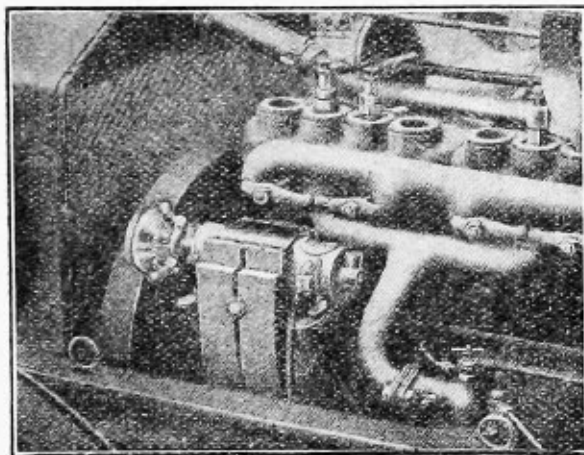
Anyone can attach in a few minutes. We guarantee this device and will refund purchase price if same is not satisfactory.

No. 1746. Regular Price, with Switch, \$14.00. Cash Price, \$8.75. For any car.

GASOLINE HYDROMETERS.

The range of hydrometer registers baume scale from 60 to 82 degrees, 4 1/2 in. long, 1 in. in diameter. Packed in neat wooden box.

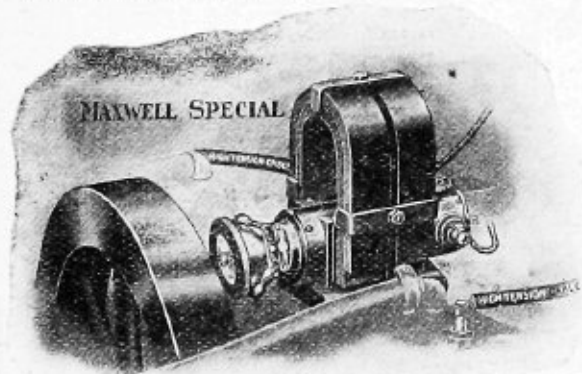
No. 1407. Regular Price, 50c. Cash Price, 15c.

SPECIAL MAGNETO FOR FORD CARS

2431

Designed especially for Model "N," "S" and "R" Ford Runabouts. Saves gasoline, increases power and requires little attention. This magneto is equipped with a Patent Friction Drive which is the most durable and best speed controller on the market, and the magneto is not run at excessive speed. Works with your regular equipment so that you do not need to get special coils, etc. Brackets and bolts furnished free, and any one can attach in 15 minutes.

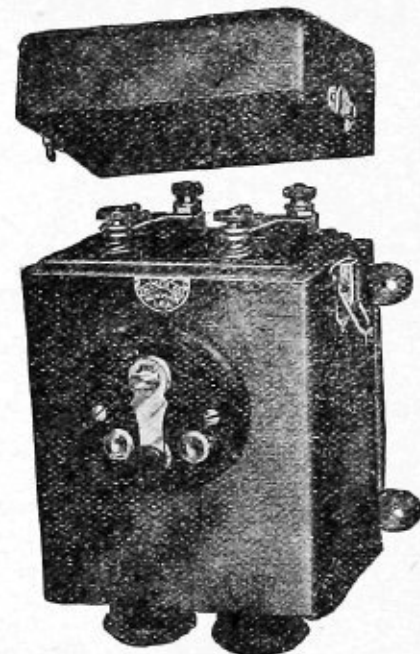
2431. Regular Price, complete, \$25.00. Cash Price, \$16.00.

SPECIAL MAGNETO FOR MAXWELL CARS

2432

Designed specially for 2 cylinder Maxwell cars. Equipped with Patent Friction Drive, the same as the Ford Magneto, and embodying in the same essential features. Can be used with your regular equipment and attached in 15 minutes.

No. 2432. Regular Price, complete, \$25.00. Cash Price, \$16.00.

THE WORLD-FAMED NEW YORK COILS.
Model 25, Two-Cylinder Dashboard Coil.

1366

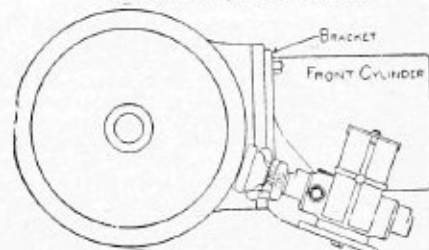
The finest type of coil manufactured. None better at any price. It is assembled in a beautiful mahogany case highly polished and finished with the best grade of varnish obtainable for out-door use. Each unit is interchangeable, and the coil is equipped with brass brackets for attaching to the dash.

It has special secondary connections. It gives the hottest spark with the least amount of current, which insures a great saving of battery consumption.

Price of Dash Coils With Switch.

No.		Regular Price.	Cash Price.
1366	Single cyl.....	\$12.00	\$8.50
1367	Double cyl.....	20.00	12.95
1868	Triple cyl.....	30.00	17.50
1369	Four cyl.....	35.00	22.50
1370	Six cyl.....	50.00	32.00

Money refunded if, after 30 days' use, any New York Coil bought from us does not give better results than any other coil, regardless of price.

HERCULES SPECIAL MAGNETO.
For the 2 Cylinder Reo.

2430

This Magneto can be fitted to any Reo car (2 cylinder) with a wrench, all brackets, bolts, nuts, etc., furnished free. This magneto is fitted with speed controls.

No. 2430. Regular Price, \$25.00. Cash Price, \$16.00.

THE VICTOR



3072

VICTOR

At last! A Triple Compound Tire Inflator that will inflate any tire in just half the number of strokes other pumps can, and with no apparent effort, even against the highest pressure desired.

Length over all, 22 inches. Cylinders, 1 1/4 inches by 1 1/4 inches—3/4 inch by 18 inches long, 20 gauge. Seamless drawn brass tubing. Base, heavy casting, enameled.

Patent applied for.

No. 3072. Regular Price, \$7.50. Cash Price, \$4.50.

TRIPLEX COMPOUND PUMP.



946

Made of heavy gauge polished brass tube. No. 946. List Price, \$5.00. Cash Price, \$4.00.

This is a double cylinder, double action compound air pump of wonderful power and capacity.

It is the fastest and easiest working automobile tire pump ever invented.

It will pump more air in less time, with fewer strokes and less physical exertion, than any other, and should be in every car equipment.

The principle is correct. The up stroke merely puts a light pressure on the air in the small cylinder, while the down pressure on the same cylinder is power.

One hundred pounds pressure obtained with almost no effort.

The barrel is 18x1 1/4 in.



942

THE IMPROVED HILL COMPOUNDING PUMP.

Will inflate a tire quicker and easier than any low priced auto hand pump. Takes up very little room in the tool box, being only 20 in. long. Its simple and accurate construction allows the operator obtaining every ounce of air possible.

No. 942. Length of barrels, 1 3/4 x 14 and 7/8 x 14 in. List Price, \$4.00. Cash Price, \$2.00.

THE COLUMBIA PUMP.

Although having only two cylinders, but being built on the triplex principle, works easier and gives more air per stroke than any other pump of its size.

No. 941. Length of barrel, 20 in. Cash Price, \$2.50.



941



3073

POWERFUL SINGLE-ACTION AUTOMOBILE FOOT PUMP

Made of heavy all-brass polished seamless tubing.

Every pump equipped with a Clair all-solid-brass pump connection and one extra washer for same.

No. 180. Has 1 7/8 x 1 1/4 inch cylinder, large heavy foot base and comfortable handle.

No. 3073. Regular Price, \$2. Cash Price, \$1.25.

STAPLEY COMPOUND PUMP.

The auto owner is quick to see that the Stapley has features that no other tire pump possesses. It pumps up a tire to any pressure in quick time.

The cylinder is made of seamless brass tube. Has no complicated parts, no valves to get out of order. The air compression is made on the down stroke, but the delivery into the tire is on the up stroke.

No. 947. List Price, \$5.00. Cash Price, \$2.75 without gauge.

No. 947A. With gauge, \$3.75.



947

PREST-O-TIRE TANKS.



932

The Prest-o-Tire tanks hold sufficient gas to inflate from 10 to 25 tires, according to size. Are made from seamless drawn steel and will withstand a pressure of 10,000 pounds to the square inch. They are charged with five pounds of liquid carbonic gas at a pressure of 900 pounds, which, as soon as the pressure is released, is formed into a gas, having a beneficial effect upon tires.

The supply is regulated by a perfect needle valve and any pressure desired can be secured.

The weight of each tank is plainly stamped on the tank, and in order to determine the amount of gas contained in the tank it is only necessary to put it on a pair of scales and weigh it; subtract whatever the tank weighs from what the scales register and the result will be the amount of the gas in the tank.

With one of these tanks all the discomforts of pumping up tires are obviated. Furnished complete with hose and tire connections, all charged and ready to put on your car.

No. 932. Prest-o-Tire Tank, complete with 2 ft. of hose and connections. Cash Price, \$10.80.

Recharging, \$1.75.

No. 933. Brass clamps, for attaching to foot board. Cash price, each, 75c. Per pair, \$1.25.

No. 934. Extra keys. Cash Price, each 5c.

UWANTA LEVER PUMP.

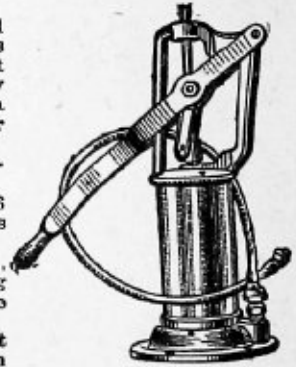
We have had continued success with this pump; it is very strongly made and gives a most powerful air pressure.

Operation is simple and easy.

Cylinder is 3x6 in. of heavy brass nickel-plated.

Lever, links, base and adjoining parts are malleable iron.

No. 944. List Price, \$6.00. Cash Price, \$3.25.



944

AUTO FLOOR PUMP.

This is the best pump made for garage use.

It is made with two large cylinders 2 1/2 in. outside diameter and 5 in. long, mounted on large wood base. Has large removable handle making operation convenient, about 4 ft. high. Fitted with ground brass valves and brass stop cock. Fitted with long, heavy hose with airtight connection. Furnished with or without gauge.

No. 945. List Price, \$12.00. Cash Price, \$8.50.

No. 945A. With gauge, Cash Price, \$9.50.



945

OUR NEW MODEL 1912 AUTOMOBILE CLOCKS

BIG REDUCTIONS IN PRICE. ALL OUR CLOCKS ARE ABSOLUTELY GUARANTEED FOR ONE YEAR.

You can order any one of these clocks with the positive assurance that you receive the best clock values on the market. Every clock is fully guaranteed for the period of one year, and will be cheerfully repaired or exchanged if defective.

ONE-DAY AUTO WATCH.



634

A small, compact, reliable timepiece, 2 1/4 in. in diameter. Fitted securely in highly polished brass case. The watch can be taken from holder and carried in vest pocket when not in use. Stem winding and setting and reliable timekeeper, fully guaranteed.

No. 634. Reg-

ular Price, \$2.00. Cash Price, \$1.39.

NEW ORMOND EIGHT-DAY AUTO CLOCK.

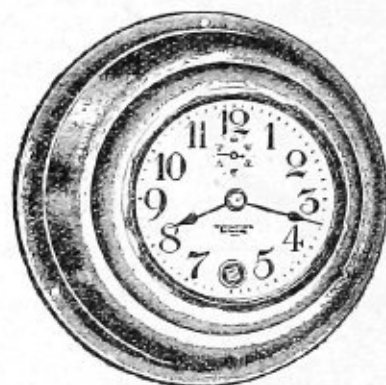


638

A perfectly dust and waterproof, highly polished brass case containing a perfect eight-day clock movement that withstands any amount of vibration of any auto. Regulator, key attachment, etc., all on the inside of glass face, so clock can be polished with ease. Face is 3 1/4 in. in diameter.

No. 638. Price, \$7.50. Cash Price, \$4.25.

BELMONT EIGHT-DAY CLOCK



3074

A very neat and handsome model and a marvel at the price we ask. Heavy brass case, absolutely dust and water proof, with porcelain dial. Height, 4 1/2 in.; width, 4 1/2 in. Finished in polished brass, nickel or black enamel.

No. 3074. Regular price (any finish), \$7. Cash Price, \$3.75.

"JERICHO" EIGHT-DAY AUTO CLOCK.

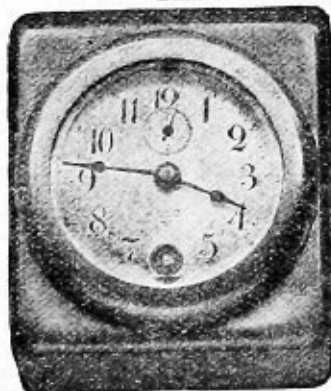


637

The finest built clock on the market. Highly polished brass case contains fine movement, which is a guaranteed, reliable timepiece. Fastened to dash in such manner as to make removal impossible without special key. Stem winds and sets, and regulated from the inside. Face is 3 1/2 in. in diameter.

No. 637. Regular Price, \$7.50. Cash Price, \$3.95.

"THE MINEOLA."

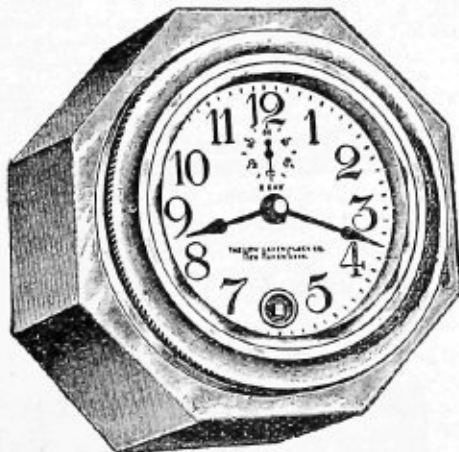


640

No. 640. Size, 3 3/4 x 4 1/2 in. List Price, \$10.00. Cash Price, \$5.50.

The best value obtainable. Highly polished brass case. French porcelain dial 2 1/4 in. in diameter. Clear figures, easily read, second hand. Will run 8 days on one winding.

"THE WESTBURY."



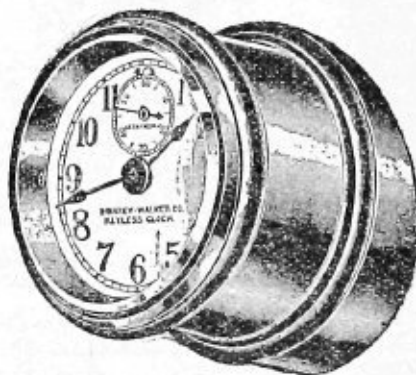
641

A new product in design and movement. Has no projections or obstructions to be broken off or prevent thorough polishing. Is absolutely thiof, water and dust proof. Runs 8 days. Size, 4 1/2 in.

No. 641. List Price, \$7.50, each. Cash Price, \$4.50.

KEYLESS CLOCK

The Perfect Auto Clock



2126

The great advantage of the patented rim-winding device is obvious. The necessity of a key is entirely done away with. To wind clock, simply turn the bezel once a week to right. To set the hands, remove the bezel by turning to the left. By reason of its double case—the movement being enclosed in an inner case—the clock is rendered both dust and moisture proof.

Made of highly polished brass, 2 1/4-inch dial.

No. 2126. Regular Price, \$8.00. Cash Price, \$6.00.

"SAVANNAH" EIGHT-DAY AUTO CLOCK.

One of the handsomest designs ever brought out in auto clocks. Case is highly polished brass; contains guaranteed eight-day movement, strictly dust and waterproof. Winds, sets and regulates under the front glass.



636

without special key. Height, 5 1/2 in. Width, 4 1/4 in.

No. 636. Regular Price, \$8.00. Cash Price, \$4.75.

REMEMBER WE PREPAY TRANSPORTATION CHARGES—SEE INSIDE FRONT COVER.

EVER READY VOLTMETER

1454

Yankee, Jr., Voltmeter. Same size as No. 1453 only for volts. This is recommended for measuring current in storage batteries. Reads from 0 to 10. Fully guaranteed for one year.

No. 1454. List Price, \$2.00. Cash Price, 89c.

EVER READY COMBINATION BOLT AND AMPERMETER

Simplex Combination Volt and Ampermeter for testing dry batteries or storage battery. A pole is used with the flexible end for measuring amperimeters, and the B pole with flexible end for measuring volts in storage batteries.

No. 1452. List Price, \$2.50. Cash Price, \$1.10.

EVER READY AMPERMETER

1453

Yankee, Jr., Ampermeter. The size of a watch. We have sold thousands of these, and they do the work better than any other small instrument we know of. Fully guaranteed for one year.

No. 1453. List Price, \$1.50. Cash Price, 79c.

INVINCIBLE TIRE TESTER

A Guaranteed Accurate Tire Pressure Gauge



3075

Fitted with automatic stop on hand. Hand stays set at pressure in tire until released by pressing button on side of case. Gauge has double scale, showing pounds pressure and pressure required in the different sized tires.

Small as an ordinary watch, easily carried in the pocket. A necessity for the Auto Owner.

Evenly pumped tires distribute the weight evenly, thereby effecting great saving in tire wear.

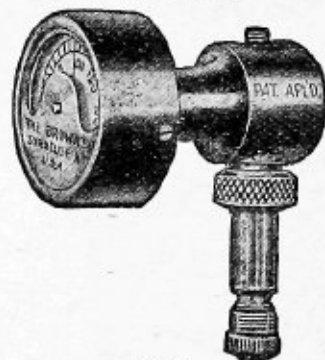
No. 3075. Reg. Price, \$2. Cash Price, \$1.25.

SCHROEDER IMPROVED TIRE PRESSURE GAUGE.

978

This gauge will tell the exact pressure in your tires by simply holding it to your valve for a second. After reading, the indicating sleeve can be pushed back in the gauge with your finger. It is 2 1/2 inches long and enclosed in a leather case.

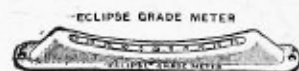
No. 978. Reg. price \$1.00; cash price 79c.

THE BROWN TIRE PRESSURE INDICATOR

3076

The Brown Tire Pressure Indicator will show at a glance the exact amount of air in the tires. Simply screw the post on the valve stem of the tube and, due to the contact of the valve plunger with a similar device in the post of the Indicator, the air is allowed to pass into the gauge. At the same time the pump can be applied to the other end of the Indicator and every pound forced into this registers itself on the gauge, the communication between the two having already been established. This device is very simple in its operation and can be as easily applied by the novice as the expert tire man.

No. 3076. Reg. Price, \$3.50. Cash Price, \$2.50.

GRADOMETER.

1450

A simple, accurate, and inexpensive instrument that will enable you to determine the grade you are ascending or descending.

No. 1450. Gradometer. Cash Price, \$1.25 each.

THE LITTLE GEM TIRE PRESSURE GAUGE

3077

Don't guess! Know the correct amount of pressure in your tires and keep them properly inflated. The Little Gem is absolutely reliable, with a perfect, legible register, and is fully guaranteed. It is the best gauge of this type we have ever seen.

No. 3077. Cash Price 45c.

THE AMERICAN SONOSCOPE.

2172

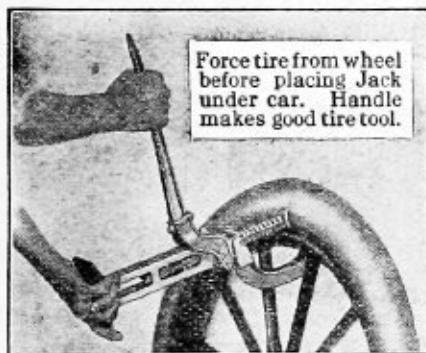
This is an instrument designed expressly for locating the knock or pound in your engine or motor caused by wear of some bearing or the loosening of a nut or bolt. Such troubles are usually out of sight, and in order to remedy them it is necessary to learn just where the trouble exists and what the cause is. This is what the Sonoscope does. When the test rod is placed over a part where the knock occurs the pound will be heard like the blows of a hammer because the instrument is so sensitive.

The instrument consists of a receiver or car piece, containing a sensitive diaphragm, to which is attached a steel test rod. The receiver is of rubberoid handsomely finished and all metal parts are nickel-plated. It is strong and durable as there is nothing to get out of order.

No. 2172. Reg. price \$2.00, cash price 95c.



Patented
Mch. 14 '05
Apr. 13, '09
Other
Patents
Pending



Force tire from wheel
before placing Jack
under car. Handle
makes good tire tool.

1912 Model Peerless Jack WITH TIRE REMOVING ATTACHMENT.

1957-1958

No. 1957. Height, 8½ in. Rise, 5 in. Weight, 4 lbs. (with tire removing attachment). Regular Price, \$2.50. Cash Price, \$1.20.
No. 1958. Height, 10 in. Rise, 7 in. Weight, 5 in. (with tire removing attachment). Regular Price, \$3.00. Cash Price, \$1.35.

BARRETT JACKS.



A perfect automatic quick acting jack, designed especially for the auto. Single acting, raising on the downward stroke only, and fitted with the new reversing lever for controlling the direction up or down. This lever may be easily knocked up or down with the jack handle without any inconvenience and without interfering with body of car.

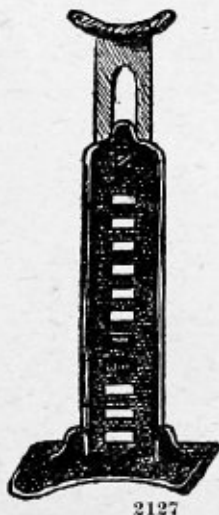
No. 2129. Barrett Standard. Reg. Price, \$4.00. Cash Price, \$2.65. Lifts 1 ton, height 11 in., raises 6 in., weighs 9½ lbs.

No. 2130. Barrett, Jr. Reg. Price, \$3.50. Cash Price, \$1.35.

Lifts 1,500 lbs., height 10 in., raises 6 in., weighs 5 pounds.

THE WILCO STORAGE STANDS

are made of malleable iron to take the place of blocking up your car with a soap box on board and blocks. The average garage floor is damp and oily and ruins your tires. This stand if used under each wheel will save your tire bills. It is adjustable to any size wheel.



No. 2127. Regular Price for set of four, \$5.00. Cash Price, \$2.00.

OUR POWERFUL STANDARD SINGLE ACTING LIFTING JACKS.



The lightest jacks on the market for the given lift per pound weight. Easily operated. Absolutely reliable. The turn of the lever at the side of the frame reverses the movement of the lifting rack upward or downward, as desired. Accidental dropping of the load is impossible. The frames are made of the best grade malleable iron, rock bars of high grade carbon steel. We guarantee every Standard Jack we sell for the period of one year, and will replace or repair any jack returned to us which is found defective in material or workmanship through faulty manufacture.

Heavy type for cars weighing over 2,000 lbs. Height, lowered, 11 in.; raised, 17 in. Weight, 9 lbs.

No. 1972. Regular Price, \$5.00. Cash Price, \$2.25.

THE OLIVER TIRE-SAVING JACK

Perfectly rigid; has a straight lift of 1½ inches and locks by passing the center. Bracket slides up and down on standard and is instantly adjusted to any height. It is covered with leather to prevent marring. The jack is placed under the hub from either front or rear of wheel, parallel with the car, or it can be placed under the axle—features not found in any other jack.



No. 3078. Regular Price, per set of four, \$6.00. Cash Price, \$4.00.

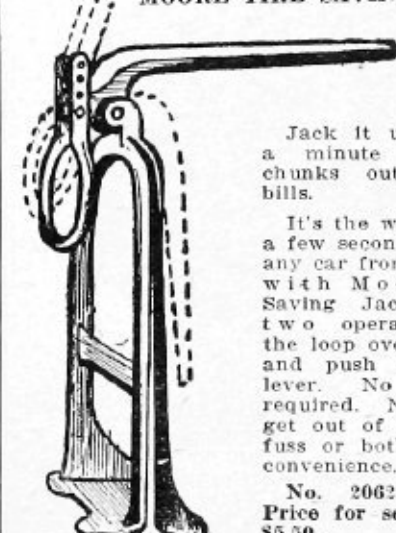
ALRITE JACK No. 1.



The Alrite Jack No. 1 is 10 in. high; screw raises up 7½ in. For any car with wheels 32 in. or under. Weight 5 lbs. It has double the speed of any other screw jack made with a ¾ in. steel screw; the wheels are so matched together that they cannot pull apart under a heavy strain. Both up and down motions are made instantly by pressing the hook to the right or left. You do not have to reach under the car. It is all done with the lever. No springs. No weak parts. It is a model of simplicity. Dealers are instructed to return your money if this jack is not entirely satisfactory.

No. 1969. List Price, \$2.50. Cash Price, 90c.

MOORE TIRE SAVING JACK.



Jack it up in half a minute and cut chunks out of tire bills.

It's the work of but a few seconds to raise any car from the floor with Moore Tire-Saving Jacks. Just two operations—slip the loop over the hub and push down the lever. No strength required. Nothing to get out of order. No fuss or bother or inconvenience.

No. 2062. Cash Price for set of four, \$5.50.

BEST QUALITY 1912 STEEL-STAMPED, ANTI-RUST BLACK ENAMEL TOOL AND BATTERY BOXES. THESE BOXES ARE POSITIVELY WATER-PROOF AND CAN BE USED FOR A STEP ON THE RUNNING BOARD.



B116.

B116. 10 $\frac{1}{2}$ x6x3 $\frac{1}{4}$. Designed for dry cells or storage battery or small tools. Suitable for Gelzler, Vesta or Wetherby storage batteries.

Reg. price \$2.50; cash price \$2.19.



Y127.

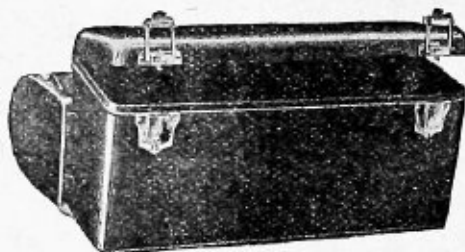
Style Y127. 12x8 $\frac{1}{2}$ x10 in. A Battery Box of ample dimensions to admit nearly all the large batteries on the market; also a very desirable Tool Box for medium and small cars. Fitted with heavy brass lock.

Y127. Reg. price, \$4.00; cash price, \$2.50.



D179-B179-B188-D188

B179. 16 $\frac{1}{2}$ x9x9 $\frac{1}{2}$. Fitted with brass lock and finger lift and aluminum top.
Reg. price \$6.00; cash price \$4.25.
B188. 18x8x8. Aluminum top.
Reg. price \$6.00; cash price \$4.25.
D179. 16 $\frac{1}{2}$ x9x10 $\frac{1}{2}$. Plain top.
Reg. price \$5.00; cash price \$3.00.
D188. 18x8x8. Plain top.
Reg. price \$5.00; cash price \$3.00.



COMBINATION PREST-O-LITE TANK AND TOOL BOX.

Inside Measurements: Length, 21 inches; width at top, 9 inches; extreme width, 12 $\frac{1}{4}$ inches; height, 9 inches.

A box designed for Prest-o-lite Model B tank and tool box. The tank compartment has a door at the end to admit the tank and to read the gauge without opening the box proper. The tool box compartment is large and affords ample space for pump, jack, chain, tools and such other supplies as are usually carried.

While a large percentage of these boxes are carried on the left side of car, we equip them for either side. Kindly mention when ordering on which side of car the box is to be carried.

Reg. price \$12.00; cash price \$7.50.

With pyramid aluminum mat. Reg. price \$14.00; cash price \$9.00.

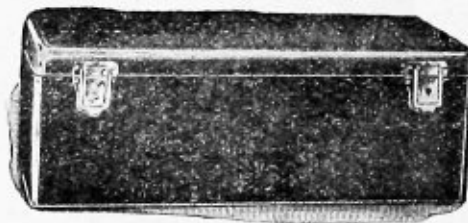


B2410A

This box has two brass hasps and brass lock with lift in center. Size 24x10x9 $\frac{1}{2}$.

B2410A. Without wood lining, but with aluminum top.

Reg. price \$10.50; cash price \$7.75.



Styles W2410-W2410X.

Inside Measurements: Length, 24 inches; width, 10 inches; height, 9 inches.

A large box designed particularly for large cars; ample space is afforded for pump, jack, chains, tools and the extra supplies and equipment usually carried on large cars.

W2410. Reg. price \$7.00; cash price \$4.75.

W2410X. With wood lining. Reg. price \$8.50; cash price \$5.75.

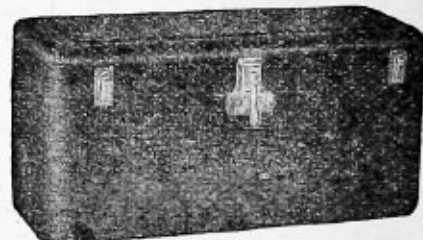


Style A-T208

Inside Measurements: Length, 20 inches; width, 8 $\frac{1}{2}$ inches; height, 10 $\frac{1}{4}$ inches.

A specially well proportioned and attractive box with a raised panel in cover designed for medium size car when running board space is limited. Affords ample space for pump, jack, chains, tools and such other supplies as are usually carried.

A-T208. Reg. price \$5.50; cash price \$3.45.



B229 REGULAR.

This box has two brass locks and lifts at each end. Size 22x9x9 $\frac{1}{2}$.

B229. Reg. price \$7.00; cash price \$4.95.

B229a. Same box, with aluminum top.
Reg. price \$10.00; cash price \$6.75.



3079 Gas Tank Cover

3079. For Model B Tank. Length, 20 inches; diameter, 6 $\frac{1}{4}$ inches.

3080. For Model E. Tank. Length, 18 inches; diameter, 6 $\frac{1}{4}$ inches.

This cover, made of 18 gauge steel with wire rolled in at both ends, is designed with an open joint to freely admit either a Model B or a Model E Tank and is drawn down tight and attached to car with regular Prest-o-lite hanger. Besides protecting the tank it makes a neat and attractive covering for this accessory.

3079 or 3080. Either style (black enameled).

Regular price \$1.50; cash price \$1.00.



B148a

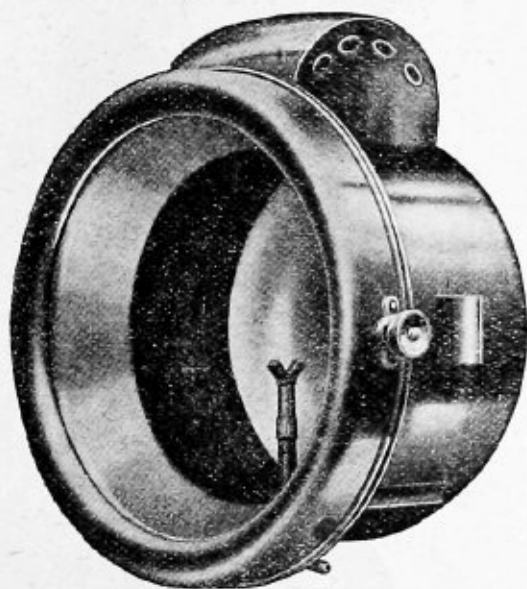
B148a. With aluminum mat. Size 13 $\frac{1}{2}$ x-8x8.

Regular price \$5.50; cash price \$3.85.

B148. Without aluminum mat. Fitted with brass lock and finger lift.

Reg. price \$4.00; cash price \$2.85.

GRAY & DAVIS CLOSE-COUPLED LAMPS



106, 107, 108

This style has a large flaring front for those who like a wide beam of light.

	No. 106. in.	No. 107. in.	No. 108. in.
Diameter of Flange.....	9%	10%	11%
Extreme Length	7%	8	8%
Extreme Height	10%	12	13%
Distance between Props..	7%	8%	9 1-16
Diameter of Lens Mirrors	6	7	8

No. 106. All-brass finish. Regular Price, Each \$7.50. Cash Price, \$6.75.

No. 107. All-brass finish. Regular Price, Each \$10.50. Cash Price, \$9.45.

No. 108. All-brass finish. Regular Price, Each \$14.00. Cash Price, \$12.60.

No. B2. All-brass finish. Regular Price, Each \$12.50. Cash Price, \$11.25.

No. B3. All-brass finish. Regular Price, Each \$10.00. Cash Price, \$9.00.

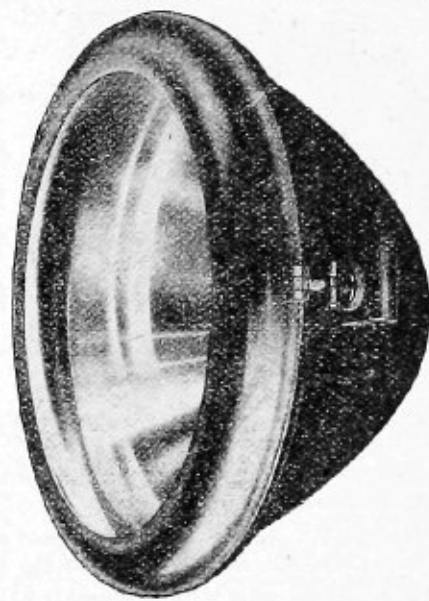
Fifteen per cent. extra for nickel finish. Five per cent. extra for enameled black or brass and black finish.

Description

This lamp embodies the very latest ideas of the art of lamp making. The body of lamp is drawn from sheet brass, and is all one piece up to door. The brass is carefully selected and annealed. The head or hood, is also drawn in one piece and is clinched to body of lamp and secured by screws from the inside. The mirror and front glass are secured by concealed screws and are readily replaced.

Each and every one of our gas lamps is carefully tested and accurately focused the last thing before it leaves our factory, and if a mirror does not give its full power it is rejected by our examiners.

GRAY & DAVIS ELECTRIC HEADLIGHT

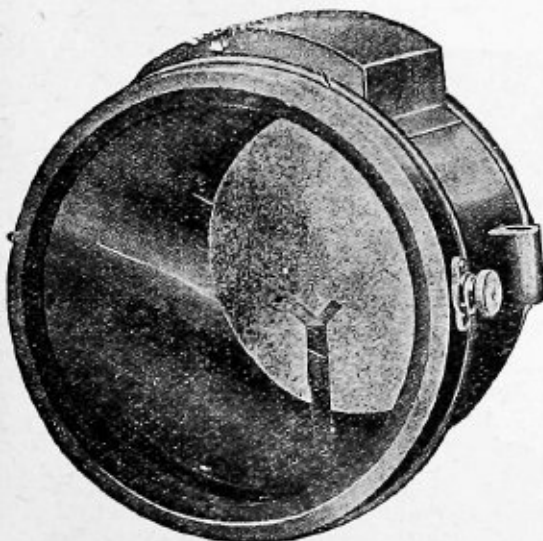


Description

The very latest type of electric parabolic headlight, fitted with inside screw focusing attachment; reflectors silvered and machined to a templet, so they are absolutely correct. This lamp is especially adapted for torpedo bodies. Furnished with 6 volt, 16, 20 or 24 C. P. bulb and cut-out plug.

	B2.	B3.
Diameter of Flange.....	12 1/4 in.	11 1/8 in.
Extreme Length	8 in.	8 in.
Extreme Height	12 3/4 in.	11 1/2 in.
Distance between Props..	10 1/2 in.	10 1/2 in.

ACETYLENE SEARCH-LIGHTS



An up-to-date flared front style. Furnished with good French Mirror lenses. Made of heavy brass, finely finished and polished. Put together with screws and rivets.

No.	Diameter of Body.	Diameter of Front.	List Price.	Cash Price.
536	5 1/4	6 3/4	\$6.50	\$3.00
537	6 1/4	7 3/4	7.50	3.50
538	7 1/4	8 3/4	8.50	4.00
539	8 1/4	9 3/4	9.50	4.50

GRAY & DAVIS OIL SIDE LAMP.



2334

Shown with Electric attachment "C."

Size body, 4 1/4 in. by 4 1/4 in.

No. 2333. Price, each, \$1.85.

No. 2334. With Electric attachment "C" extra, \$1.43.

For Full Nickel Finish add 15 per cent. extra.

For Brass and Black Finish add 5 per cent. extra.

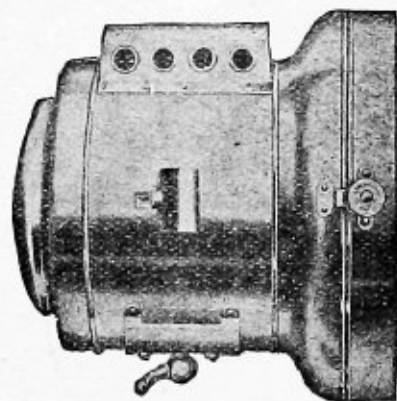
The latest type tubular cold blast oil lamp suitable for large or medium size cars.

E. J. MODEL 4A
Highly Polished Brass Oil Side Lamp.

2328

Size, body, 4 1/4 by 4 1/4 inches; height, 12 in.
No. 2328. Regular Price, \$10.00. Cash Price, \$1.50 pair.

OUR POPULAR FLARED FRONT SEARCHLIGHT SET OF



521

**Two Lamps
One Gener-
ator
and 10 ft. of
Tubing
for
\$10.50**



523

Especially suitable for Ford, Buick, Maxwell, Reo Runabouts and Touring Cars.

No. 521. Value \$25.00. Our special price for complete outfit... \$10.50
These new models are the latest for 1912.

The popular flared front searchlight will be extensively used during the coming season. Our lamps are made entirely of extra heavy brass and assembled without solder, all parts being riveted or screwed together, the door and lens mirror being removable.

As a headlight, these lamps are unequalled. They are of the most popular design in acetylene lamps. They combine all the latest improvements with a peculiar excellence of their own, at a price within easy reach. Equipped with powerful lens mirror reflectors, projecting a powerful light. Made with adjustable burners which enable you to focus the light to any desired point. In presenting this popular design, you will find the latest development in the art of lamp making. We recommend these lamps to those who appreciate true value, skilled workmanship, efficiency and durability.

The size of the generator is 15 inches high and 8 inches wide, and has a capacity of three and one-half pounds of carbide, and will supply gas for two of these lamps from seven to eight hours.

Price of lamp and generator, if bought separately: Flared front lamp—Diam. of door, 9 in.; distance between props, 7 in.; size of lens, 6 in. No. 522. Regular Price, \$7.50. Cash Price, \$3.75. Generator—Height, 15 in.; width, 8 in. No. 523. Regular Price, \$8.50. Cash Price, \$3.50.

Outfit No. 521A. We call our Midget Set. It is for small cars. The set comprises two lamps as above, but smaller. Diameter of door 6 3/4 in.; between Props, 5 1/4 inches; generator is 12 1/2 x 6 1/2 in.; capacity, 2 pounds will burn above lamps about 6 hours. Ten foot of rubber tubing. Set complete.

Regular Price, \$20.00. Cash Price, \$8.75.

GRAY & DAVIS ELECTRIC SIDE LAMPS, 1912 MODEL

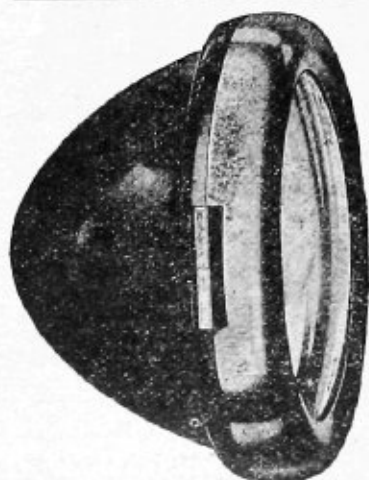
If you want the best, here they are, right up to the Gray & Davis standard. Equipped with 6 volt, 4 c. p. lamp and electric connector. Made to take special socket for torpedo bodies or to take regular flat standard brackets. All brass finish or finished in black and brass trimmed.

Diameter of flange, 7 3/8 in.; extreme length, 5 1/2 in.; extreme height, 7 3/8 in.

Brass Finish. No. D7. Cash Price, \$4.50.

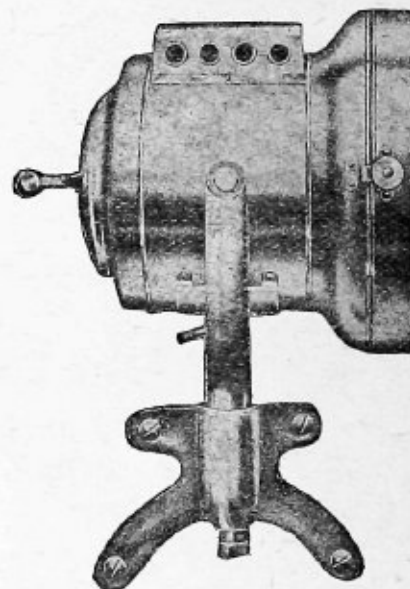
Especially adapted for torpedo bodies.

Black and brass finish. No. D7A. Cash Price, \$5.04.



D7

FLARED FRONT LENSE MIRROR SWIVEL SEARCHLIGHT.



525

This lamp is similar in all respects to the flared front searchlight described opposite. The only difference is they are mounted on a practical brass fork bracket and dash attachment. These lamps possess the same handsome finish, skilled workmanship and best material as the lamps described opposite.

An absolute necessity for motorists wishing to maintain high speed on dark roads. Can be swung in any direction, enabling the driver to see in any direction of the road. No. 525. Regular Price, \$12.00. Cash Price, \$5.75. Diam. of door, 8 1/2 in.; width of bracket, 6 in.; diam. of lens, 5 in.

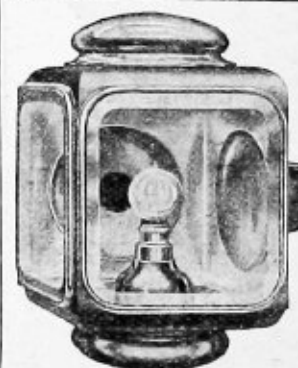


2313

GOGGLE OR METER CASE.

Made entirely of best harness leather. Hand stitched with button clasp.

No. 2313. Regular Price, 50c. Cash Price, 19c.



Type A34 Type A103

Type A34. Size of body, 4 3/4 x 4 1/4 inches.

No. A34, each, Cash Price, \$4.50.

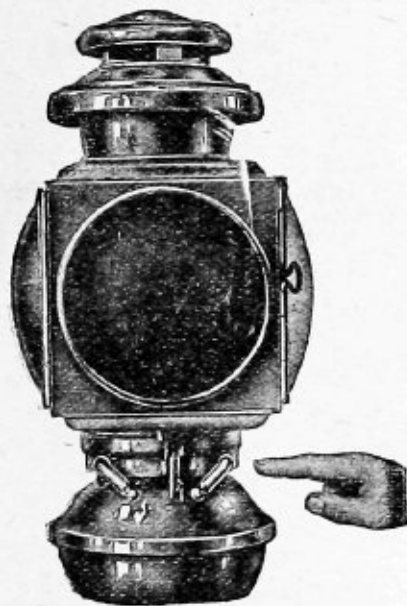
Type A103. Size of body, 4 3/4 x 4 1/4 inches.

No. A103, each, Cash Price, \$3.60.

Note.—If wanted in black and brass finish add 10 per cent.

E. & J. FAMOUS TAIL LAMP.

Patent Lock Mount Fastener.



2326

The Lamp that stays lit.
Suitable for all cars.

Red, Green and White Glasses fitted with combination bracket for either round or flat bracket.

No. 2326. Regular Price, \$4.50. Cash Price, \$3.65.



529

COLUMBIA COLD BLAST TAIL LAMP

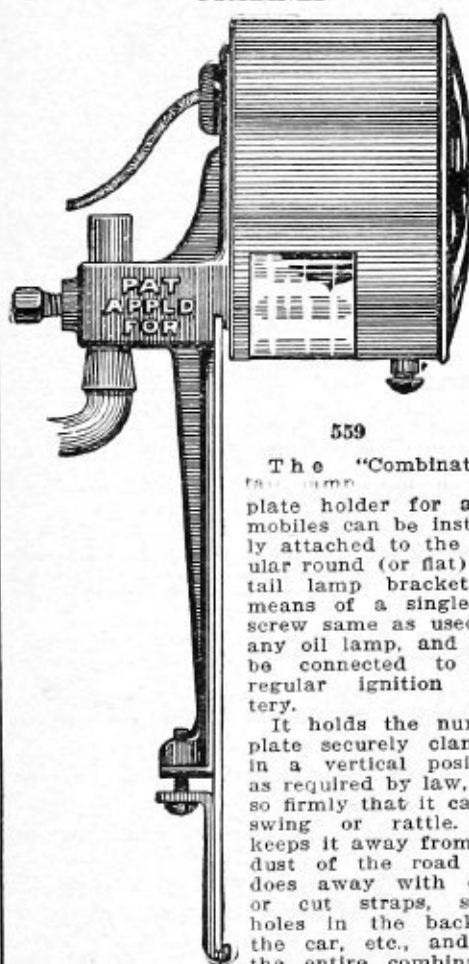
Absolutely Guaranteed to Stay Lit

A lamp you can always depend on; it always gives light and cannot jar or blow out, no matter how much vibration, how rough the roads are. Durably constructed of solid heavy gauge brass, highly polished, silver-lined, fitted with ruby glass on side, white for showing license number. Height, 10 in.; diam. of door, 4 in.; diam. of red glass, 3 in.

No. 529. Regular Price, \$3.00, Less Bail. Cash Price, \$1.39.

No. 544. Same Lamp, with Bail. Cash Price, \$1.49.

COMBINATION ELECTRIC TAIL LAMPS AND NUMBER PLATE HOLDER COMBINED



559

The "Combination" tail lamp

plate holder for automobiles can be instantly attached to the regular round (or flat) end tail lamp bracket by means of a single set screw same as used on any oil lamp, and may be connected to the regular ignition battery.

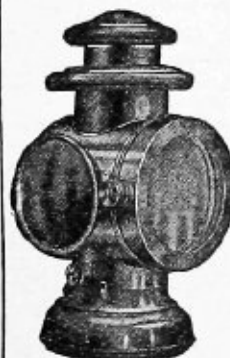
It holds the number plate securely clamped in a vertical position, as required by law, and so firmly that it cannot swing or rattle. It keeps it away from the dust of the road and does away with dirty or cut straps, screw holes in the back of the car, etc., and yet the entire combination

of lamp, bracket, and number plate may be instantly removed when washing.

With this holder any number of changes may be made, as the length of the plate is immaterial, and the height is allowed for by the adjustable clamp, so that it is but the work of a few seconds to change numbers when touring in different States or countries.

It throws a clear, white light directly on the number and a bright red light to the rear through a 3 in. lens.

No. 559. "Combination" lamp and holder complete with 6 volt, 1/2 ampere carbon lamp. List Price, \$5.00. Cash Price, \$3.50. Extra 6 volt, 1/2 ampere Tungsten lamps, each, List Price, 60c. Cash Price, 45c.



2336

GRAY & DAVIS

Oil or Electric Tail Lamp

9 1/4 inches high.

No. 2336. All Brass. Cash Price, \$3.10.

No. 2337. All Brass, with Electric Attachment. Cash Price, \$4.37.

No. 2338. Brass and Black Finish. Cash Price, \$3.25.

No. 2339. Brass and Black Finish with Electric Attachment, \$4.67.

GRAY & DAVIS ELECTRIC TAIL LAMP.



Type B5

No. B5. Cash Price, \$3.60.

Diameter, 3 3/4 in.; extreme length 3 3/4 in.; extreme height, 4 in.

Five per cent. extra for black enamel or black enamel and brass; ten per cent. for black enamel and nickel; fifteen per cent. for all nickel finish.

Provided with 6 volt, 2 C. P. bulb and Edison-Swan receptacle; not easily opened; prevents boys from stealing lamps.

Made for regular round or flat props. Large red lens (round); side glass allows white light to shine on number plate to conform to various State laws.

DIETZ DAINTY TAIL LAMPS

Strongly constructed of heavy gauge brass, fitted with positive locking oil pot and perfect ruby semaphore lens.

Height, 10 1/4 in.; 3 in. side glass, and 3 in. ruby semaphore. 15 per cent. added for gun metal finish, 20 per cent. for black or white nickel.

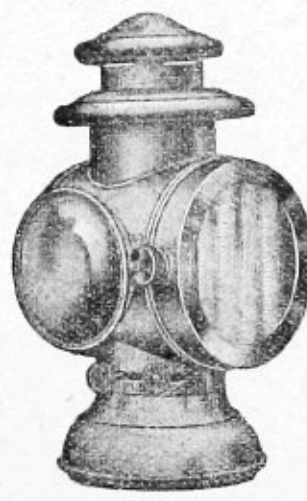


3082

No. 3081. Dietz Dainty Tail Lamps, plain for oil only. Regular Price, \$4.00. Cash Price, \$2.90.

No. 3082. Dietz Dainty Tail Lamps, combination for oil and electricity. Regular Price, \$5.75. Cash Price, \$4.25.

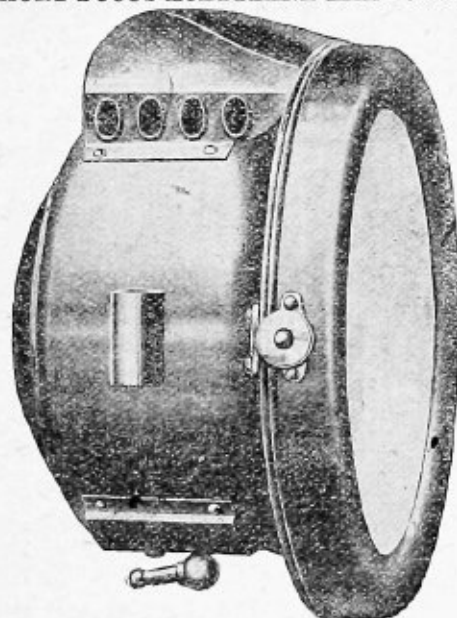
WILCO SPECIAL TAIL LAMPS



3083

Made of heavy brass highly polished; size, 9 1/4 inches high. Silver lining, with ruby semaphore lens. Will fit either flat or round bracket.

No. 3083. Reg. Price, \$3.00. Cash Price, \$2.25.

SHORT FOCUS ACETYLENE HEAD LIGHT.**236, 237, 238**

Model	Model	Model
No. 236	No. 237	No. 238
Pair.	Pair.	Pair.

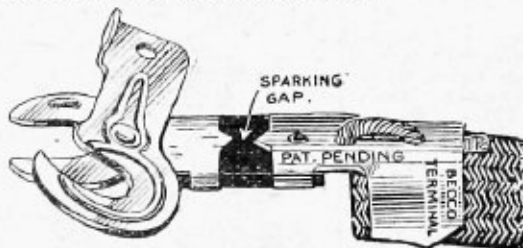
Polished Brass	\$9.00	\$11.00	\$12.50
Diameter of Front	8 1/2 in.	9 1/2 in.	10 1/2 in.
Diameter of Mirror	5 in.	6 in.	7 in.
Distance Between Props (center to center)	6 3/4 in.	8 in.	8 1/2 in.
Extreme Length	6 in.	6 1/2 in.	6 3/4 in.

These models differ only in size. Bodies are drawn from one piece of heavy gauge brass. The front of lamps are fitted with highly polished silver plated reflector. Each lamp is fitted with the highest grade magnifying mirror. Props and hinges riveted on. A thoroughly high grade lamp in every respect.

Please order by number.

THE BECCO TERMINAL.
The Trouble Finder.

Every motorist spends frequently from 15 minutes to several hours trying to locate the cause of one of the cylinders of his engine not working. This feature of a gasoline engine is one of the most puzzling problems to solve. The BECCO TERMINAL makes it easy. It shows instantly by opening the lever (as shown in the cut below) whether when your engine goes wrong, the trouble is due to the lack of electricity or to your spark plug.

**2492—Cut showing the terminal open.**

The construction of this terminal is first class, so that it lasts indefinitely. A piece of fibre is clamped between the front and rear parts, which are made of brass, so that when the lever is open the current is interrupted and will jump over the gap.

It will also be noted that when the lever is closed on this terminal it is locked absolutely on the plug, so that no amount of jarring or other strain on the terminal will disconnect it. It fastens on any spark plug, whether made with a button, as above, or with a nut, which screws down on it.

No engine is complete without it.

No. 2492. List Price, each, 25c. Cash Price, 15c.

Convert your lamps to up-to-date Electric Head Lights with our Wilco Convertable Reflector.

**146, 147, 148**

These reflectors are of the same quality as those used in our regular lamps. They are designed for use in transforming acetylene head lights into electric head lights. They are made with a wide flange, somewhat wider than the cut would indicate. This flange may be trimmed to make reflector fit lamp whose front diameter is within the limits given in the table above. The reflectors are designed to be fastened to inside of lamp door, but may be placed in the lamp itself, if preferred. Each reflector is wired and fitted with our special adjustable Ediswan Bayonet Lock socket, Ediswan double connector and special 8 c. p. Tungsten lamp bulb.

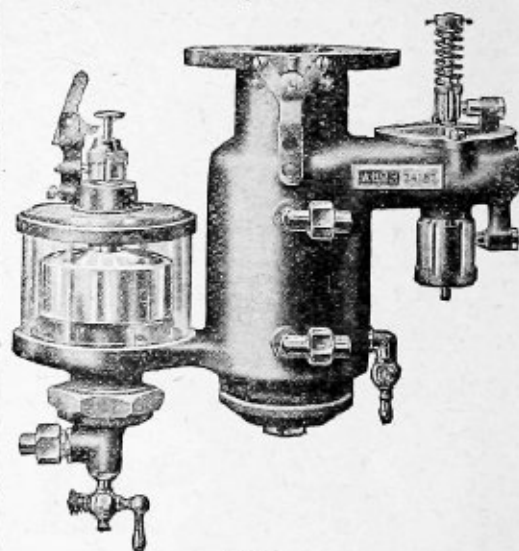
Lamps may be sent to us and we will put reflectors into them, making a moderate charge for our services. Reflectors should never be placed back of split, or sectional, lenses.

	Size 146	Size 147	Size 148
Net Cash Price,			
Each	\$3.50	\$4.00	\$4.50
Diameter of Reflector	7 in.	8 in.	9 in.
Largest Diameter of Flange	8 1/2 in.	10 in.	12 in.

To Fit Lamp Having a Front Diameter of 7 1/2 to 8 1/2 in. 8 1/2 to 10 in. 10 to 12 in.

Order by Number.

STROMBERG CARBURETORS.
Type "A" Water-Jacketed Carburetor.

**2448**

Price of Type "A."

No. No.	Cash Price.
2448—1, 1 -inch	\$17.50
2449—2, 1 1/4 -inch	20.00
2450—3, 1 1/2 -inch	25.00
2451—4, 1 3/4 -inch	30.00
2452—5, 2 -inch	40.00
2453—7, 2 1/2 -inch	50.00

Price of Type "B."

No. No.	Cash Price.
2454—1, 1/2 -inch	\$17.00
2455—2, 3/4 -inch	19.00
2456—3, 1 -inch	23.00
2457—4, 1 1/4 -inch	28.00
2458—5, 1 1/2 -inch	35.00

Price of Type "C."

No. No.	Cash Price.
2460—2, 1 1/4 -inch	\$30.00
2461—3, 1 1/2 -inch	35.00
2462—4, 1 3/4 -inch	40.00
2463—5, 2 -inch	50.00
2464—6, 2 1/4 -inch	60.00
2465—7, 2 1/2 -inch	65.00

WILCO ELECTRIC TAIL LAMP.

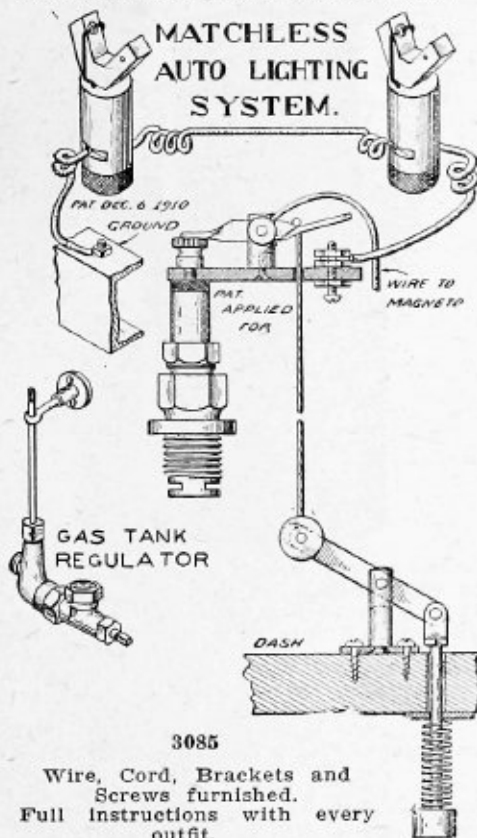
**3084**

Four-inch Front—this Electric Lamp is one-piece Torpedo shape fitted with red jewel and security socket. Finished in Polished Brass.

No. 3084. Complete with 6 or 4 Volt 4 C. P. bulb. Regular Price \$2.50. Cash Price \$1.85.

LIGHT YOUR LAMPS THE MATCHLESS WAY

Only the highest grade material used.

MATCHLESS AUTO LIGHTING SYSTEM.

3085

Wire, Cord, Brackets and Screws furnished.
Full instructions with every outfit.

The Matchless Auto Lighting System is an inexpensive device for lighting the acetylene lamps from the seat, while the car is in motion without the use of matches.

Turn on gas from the seat, and press button on the dash with the foot. A spark from the motor will light both lamps instantly. As the gas controller is also a regulator, the correct amount of gas will flow into the lamps, so that the flame will be at the right height.

With this device on your car, gas is used only when needed, as it is no trouble to relight the lamps.

Quite a number of cities are prohibiting the use of acetylene lamps on the boulevards and in the parks. This makes it necessary to stop the car in order to relight them when driving on side streets or country roads.

Our burners are made of imported German Lava. The wire used for sparking ends is special heat-resisting and will not rust. There are no screws, nuts or clamp connections to get loose from vibration, therefore the spark is positive.

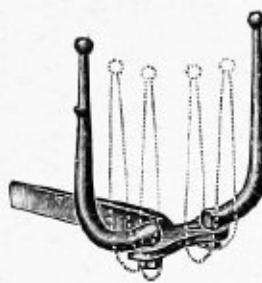
If car is equipped with a gas generator the controller is not needed. Place generator in a position where it can be reached from the seat.

No. 3085. Without controller. Cash Price, \$5.30.

No. 3086. Complete. Cash Price, \$9.00.

ADJUSTABLE FORK BRACKETS

For Gas Lamps of all Makes

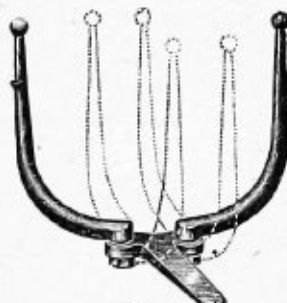


597A

No. 597A. Black Enamelled Finish. Price, per pair, \$2.00. Cash Price, \$1.25.

ADJUSTABLE FORK BRACKETS

For Gas Lamps of all Makes



597

No. 597. Black Enamelled Finish. Price, per pair, \$2.00. Cash Price, \$1.25.

This bracket can be used on any size lamp; it is made of malleable iron, finely finished in black enamel.

Bracket bolts in place and requires no expert mechanic to adjust.

This bracket will fit the majority of cars.

This bracket can be used on any size lamp; it is made of malleable iron and finely finished in black enamel.

Bracket bolts in place and requires no expert mechanic to adjust.

This bracket will fit the majority of cars.

THE LAW?

Nathan's Headlight Shades.

You can have your headlights lighted in the city, but they must be covered with these shades. Easy to put on and take off. Simply slip over front of lamp and draw string. When out of city limits can be easily removed.



620

Made of rubber cloth.
No. 620. List Price, 48c. each. Cash Price, 39c. each.

Made in stock sizes to fit all size lamps. In ordering be sure and give the measure of your gas lamps across the fronts.

"WILCO" LAMP COVERS

For Headlights.

Made of best quality rubber cloth. Absolutely waterproof. A sure protection. The best fitting cover on the market.



613

Will fit all headlights, flare front, with or without bale, bullet and search or cylinder lamps, rigid or swinging bracket; better than any other lamp cover. Made in only 3 sizes. When ordering give diameter of front glass.

No.	Size	Price each.	Cash Price.
613	6 to 8 in.	\$1.00	58c
614	8 to 10 in.	1.00	58c
615	10 to 12 in.	1.00	58c

"WILCO" LAMP COVERS

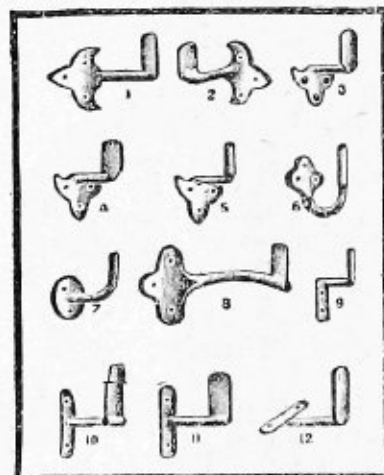
For Side and Tail Lamps.



616

Fits all sizes and makes of tubular and square lamps, gas or oil, and either side or tail lights. Made in 3 sizes. Small size fits lamps up to 12 in. in height; medium size up to 15 in.; large up to 18 in. When ordering give height of lamp.

No.	Size	Price each.	Cash Price
616	Small	80c	55c
617	Medium	80c	55c
618	Large	80c	55c

SIDE AND TAIL LAMP BRACKETS.

601 to 612

No.	Description	Price	Cash
601.	Side, rights and lefts; each..	1	\$0.50
602.	Side, rights and lefts; each..	2	.50
603.	Tail bracket; each.....	3	.40
604.	Side, right or left; each.....	4	.40
605.	Tail bracket; each.....	5	.35
606.	Tail bracket; each.....	6	.30
607.	Tail bracket; each.....	7	.25
608.	Side, rights and lefts; each..	8	.40
609.	Tail bracket; each.....	9	.19
610.	Tail bracket; each.....	10	.40
611.	Side or tail; each.....	11	.40
612.	Tail bracket; each.....	12	.40

"WILCO" PLUG LEAK BOILER COMPOUND

642

This is a chemical which, added to the water in the boiler, prevents leaky tubes. It will re-seal tubes already leaking, and make them steam and water tight. If added to the water of the radiator it will also close leaks, weather in water jackets, pipe joints or radiator tubes.

No. 642. List Price, 75c. Cash Price, 30c.

"WILCO" ALUMINO FINISH

A ready-mixed aluminum paint for motorcycles, motorboat engines, mufflers, and radiators. Alumino Finish will stand a high degree of temperature without burning off or discoloring, and for this reason it is specially adapted for this use. It is water-proof, prevents rust and will not tarnish. Put up in cans.

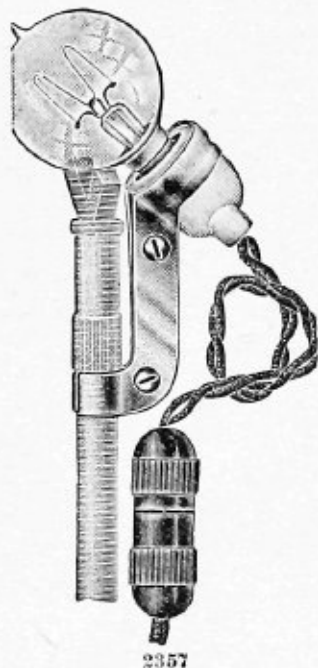


643

No. 643. 1/4 pt. can. List Price, 60c. Cash Price, 30c.

ELECTRIC ATTACHMENTS FOR AUTOMOBILE LAMPS.

The simplicity and convenience of these attachments will appeal to every automobile user. The change from gas or oil to electric light or vice versa can be made in a minute, on the road or in the garage. Each



outfit is equipped with cord and a midget separable connector. A series-multiple battery or storage battery will operate the lamps.

To use gas burner attachment place at-



attachment around gas burner nipple and insert bulb directly over the center of gas burner. When you desire to use gas remove bulb and slide attachment down.

To use oil lamp attachment place clamp around nose of oil burner, connecting wires through oil burner apertures. When using oil, remove entire electric attachment.

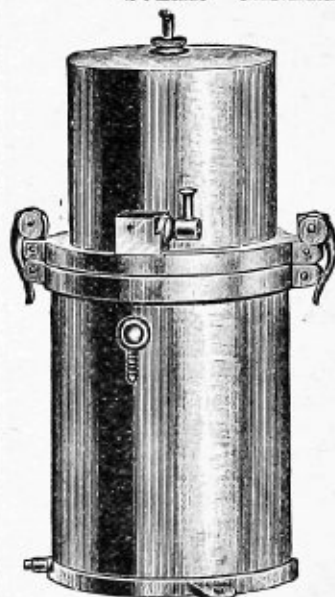
Cash Price without Electric Lamps:

No. 2357. Attachment for Gas Lamp Burner, with hard rubber circuit Breaker or Electric Connector. Cash Price, 55c.

No. 2358. Attachment for Oil Lamp Burner, with hard Rubber Circuit Breaker or Electric Connector. Cash Price, 55c.

No. 2359. Tungsten Bulbs, Extra, 45c.

No. 2360. Ordinary Carbon Bulb, Extra, 28c.

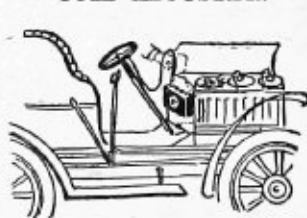
"SOLAR" GENERATOR.

No. 543. Price, \$12.00. Cash Price, \$9.25

The latest improved type; the acme of perfection; none better.

Model 811—13 in. high, 7½ in. wide. Capacity 2½ lbs. carbide. Will run one large or two small head-lights; supplies ¾ ft. of gas per hour. No. 542. Price, \$9.00. Cash Price, \$6.90.

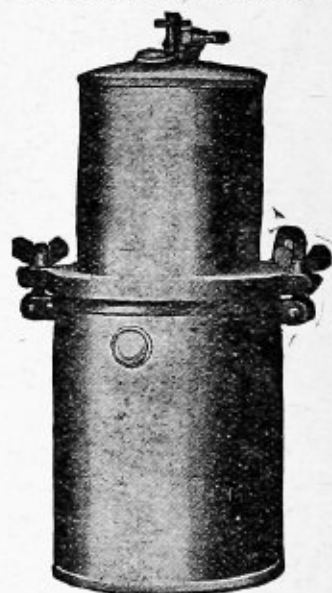
Model 712—15 in. high, 8 in. wide. Capacity 3¼ lbs. carbide. Will supply any two head-lights with 1½ ft. of gas per hour.

COIL ADJUSTER.

1456

Coil Adjuster. This simple device enables you to adjust your coil and spark plugs and also show you quickly which wires are to be attached to battery, coil and commutator. Directions: Turn on switch and fasten the spring clamps on brake or clutch pedal or steering wheel or any engine part or frame; take insulated end and place on coil as illustrated, which will cause each separate unit of coil to vibrate as soon as it is touched, provided the coil is adjusted; otherwise adjust until it does properly vibrate. To test spark plug, lay it on engine with the usual spark plug wire attached, then touch coil with the adjuster, as illustrated.

No. 1456. List Price, 50c. Cash Price, 19c.

ROUND GENERATOR.—In Two Sizes.

Our new 1912 Model Generator is well made and designed on the right principle. Made of seamless brass sheets, drawn from heavy gauge metal. The water contained in the top part drops into lower tank, containing carbide. The unused carbide is separated by the screen at the bottom, insuring fresh charge at all times.

No.	Height.	Width.	Capacity.	Reg. Price.	Cash Price.
540	13½ in.	5 in.	2 lbs.	\$7.50	\$3.00
541	15 in.	6¼ in.	3½ lbs.	8.50	3.50

Either Generator furnished for one or two lamps, complete, with bracket for attaching to side of car or to the running board.

GENUINE BROWN COMPRESSOMETER

Shows irregularities in your cylinders; enables you to regulate the pressure in each cylinder without taking it apart. Simply take out your spark plug, insert instrument, and by bringing your motor to compression point you can read the exact condition of each cylinder.

No.	Size Thread.	Regular Price.	Cash Price.
1445	½ in.	\$5.00	\$3.75
1446	Metric		
1447	A. L. A. M.		

**AUTO BODY POLISH AND ENAMEL REVIVER**

This is different from other polishes, as it adds a new coating, thus filling up all the cracks, scratches and places where the varnish has become marred and worn. It positively renews the original gloss of varnish surfaces. It dries with a hard, smooth finish that will not hold the dirt and is impervious to oil or water. Only a light application is necessary.

No. 2202. 8-oz. jug. Regular Price, \$1.00. Cash Price, 69c.
No. 2203. 1-gal. jug. Regular Price, \$8.00. Cash Price, \$4.75.



560

COLONIAL GAS LAMP BURNERS.

American Make.

All lava burner and will fit any lamp made in this country. An excellent burner, fully guaranteed.

No. 560. Size, $\frac{1}{2}$ ft. Regular Price, 30c. Cash Price, 8c.

No. 561. Size, $\frac{3}{4}$ ft. Regular Price, 30c. Cash Price, 6c.



562

VON SCHWARTZ PERFECTION LAMP BURNERS.

German Make.

All lava burner and will fit any lamp made in this country. Imported from Germany.

No. 562. Sizes $\frac{1}{2}$ ft. and $\frac{3}{4}$ ft. Regular Price, 50c. Cash Price, 19c.



563

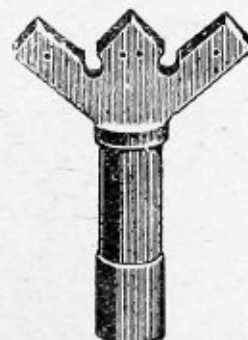
BRAY LUTA GAS LAMP BURNER.

Made in England.

An all brass burner, with lava tips. Will fit any lamp made in this country.

No. 563. Size, $\frac{1}{2}$ ft. Regular Price, 40c. Cash Price, 16c.

No. 564. Size, $\frac{3}{4}$ ft. Regular Price, 40c. Cash Price, 16c.



565

VON SCHWARTZ SEARCHLIGHT GAS LAMP BURNER.

An unusually powerful burner for American made headlights.

No. 565. Size, $\frac{1}{2}$ ft. Regular Price, \$1.50. Cash Price, 75c.

No. 566. Size, $\frac{3}{4}$ ft. Regular Price, \$1.50. Cash Price, 75c.

GAS LAMP TUBING.

Regulation size as generally used.

No. 578. Rubber, fine quality. Price, foot, 10c. Cash Price, 4c.

No. 579. Rubber, extra grade. Price, foot, 15c. Cash Price, 7c.

No. 581. Copper, $\frac{1}{4}$ in. O. D. Price, foot, 15c. Cash Price, 10c.

No. 582. Copper, 12 ft. length. Price, \$1.50. Cash Price, \$1.00.

Best seamless, annealed tubing.



578

GENERATOR TUBING NIPPLES. For Rubber Only.



568

569

571

570

For $\frac{3}{16}$ in. opening.

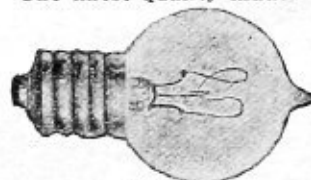
No. 568. Style I. Regular Price, 10c. Cash Price, 3c.

No. 569. Style T. Regular Price, 10c. Cash Price, 3c.

No. 570. Style Y. Regular Price, 10c. Cash Price, 3c.

No. 571. Style X. Regular Price, 10c. Cash Price, 3c.

GENUINE "TUNGSTEN" LAMPS. For All Electric Lighting Service. Used in Lamps, Dome Lights, etc. The finest quality made.



2344

PEAR SHAPE.

No.	Size.	Volts.	C.P.	Price.	Our Price.
2340.	1 in.	4	4	.50	.45
2341.	1 in.	6	6	.50	.45
2342.	1 1/4 in.	6	6	.50	.45
2343.	1 1/4 in.	8	10	.50	.45

ROUND SHAPE.

No.	Size.	Volts.	C.P.	Price.	Our Price.
2344.	$\frac{1}{2}$ in.	4	4	.50	.45
2345.	$\frac{1}{2}$ in.	6	4	.50	.45
2346.	1 in.	4	4	.50	.45
2347.	1 in.	6	6	.50	.45
2348.	1 1/4 in.	6	6	.50	.45
2349.	1 1/4 in.	8	10	.50	.45

TUBULAR SHAPE.

Special cap base each end for Dome Lights. Price.. Our Price.

No.	Volts.	C.P.	Price.	Our Price.
2350.	4 V.	4 C.P.	\$0.60	\$0.54
2351.	6 V.	6 C.P.	.60	.54

Mention style of base—Miniature or Candleabra—if not certain, send sample.

REGULAR CARBON LAMP.

Same shape as Tungsten. Used generally in motor boat and auto tail lamps, dashboard gauge lamps; also for trouble-finder electric lamps.

No. 588. 4 or 6 c. p. lamps, 6 or 8 volts. List Price, 40c. Cash Price, 28c.



2352

TURN DOWN BURNERS. HILO DE LUXE.

Can be turned down low without carbonizing. Fits any American lamp. $\frac{1}{2}$, $\frac{3}{4}$, $\frac{5}{8}$, or 1 foot size.

No. 2352. Regular Price, 50c. Cash Price, 30c.



567

CALCIUM CARBIDE.

The finest grade of crude carbide obtainable. Gives satisfactory results and never fails in generating.

We sell the $\frac{1}{2}$ in. size only. This is the most economical and best for auto lamps.

No. 573. 2 lb. cans, Cash Price, 19c.

No. 573A. Case of 24 2 lb. cans. Cash Price, \$3.60.

No. 573B. 10 lb. can. Cash Price, 75c.

No. 573C. Case of 6 10 lb. cans. Cash Price, \$3.90.



573

No carbide sent C. O. D. without deposit sent with order.

BRASS LAMP TUBING



3086

Fitted with special rubber ends, to connect with copper tubing. These ends are easily adjusted and can be replaced at little cost when worn out.

The brass tubing is strongly made and will last for years.

No. 3086. Reg. Price, 50c. Cash Price, 25c.

NON-CORRODING GAS BAG

Special rubber compound, made to resist the corrosive nature of acetylene gas.

No. 576. Regular size. Price, 25c. Cash Price, 10c.

No. 577. Highest quality pure Para rubber, specially treated. This is the best gas bag hat has come to our notice. The fine quality of material permit their stretching to a great extent without tearing or cracking. Acetylene gas has no apparent effect upon them.

No. 577. Regular size. Price, 35c. Cash Price, 20c.



576

RUBBER LAMP CONNECTIONS.

For connecting lamps and generator or tank with supply line. A most handy article. About 12 in. long, with reinforced nipple on both ends.

No. 583. Grade A. Price, 25c. each. Cash Price, 9c.

No. 583A. Grade AA. Extra fine quality tube with special ends. Will not break loose. Price 35c. each. Cash Price, 15c. each.

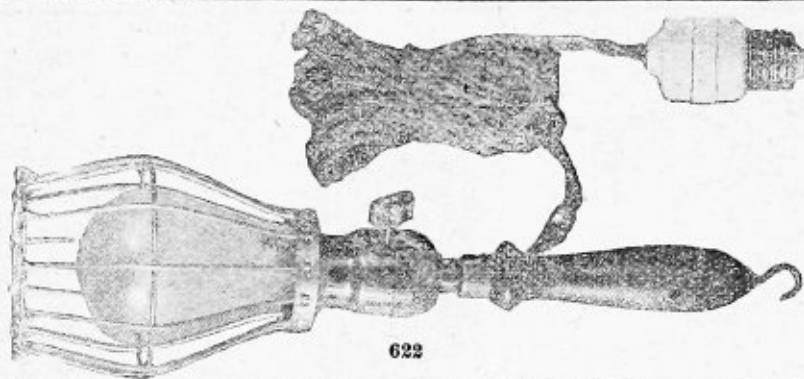


583

GAS BURNER CLEANER.

A handy little tool for cleaning gas lamp burners. Saves lots of annoyance and does the work quickly. Keeps your burners clean.

No. 567. Regular Price, 15c. Cash Price, 5c.



110 VOLT GARAGE LAMP.

No. 622. List
Price, complete,
with 10 ft. of cord
and socket, \$2.50.
Cash Price, \$1.40.
For higher voltage
add to list 20c.

DASHBOARD ELECTRIC LAMP.

Furnished in 45 or 90 degrees angle,
with 4 or 6 volt carbon lamp.

No. 625. List Price, \$2.00. Cash
Price, \$1.25.

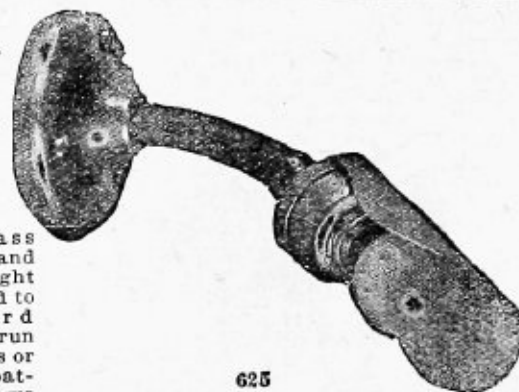
DASHBOARD ELECTRO LAMP.



623

No. 623. Price, \$1.50. Cash Price, \$1.00.

This brass
holder and
electric light
is attached to
dashboard
and wires run
to dry cells or
storage bat-
tery. It throws
a clear light
over dash-
board, Speed-
ometer, gaso-
line gauge,
clock, coil,
etc., complete
with wire and
bulb.



625

BUCKLE LOCKS.

Can be used as a strap lock
or a chain lock on bicycles,
boats, extra tires, tool boxes,
trunks, etc.



2388

No.	Size.	Reg. Price.	Cash Price.
2388	¾ in.	\$0.75	\$0.50
2389	1 in.	.85	.69
2390	1¼ in.	.95	.69
2391	1½ in.	1.05	.79

ELECTRIC DOME LAMPS.

These are the latest and finest dome lamps
out. They throw a pure, clear crystal light.

Holophane glass
globes. They are un-
doubtedly the most
beautiful lamps built
for enclosed cars,
launch cabins, etc. A
6 volt battery will
give plenty of light to
read by. Most power-
ful dome lamp made.



630

No.	Dome.	List Price.	Cash Price.
630	3 in.	\$3.00	\$2.00
631	4 in.	3.25	2.15
632	5 in.	3.50	2.35

AUTO CRAWLER.

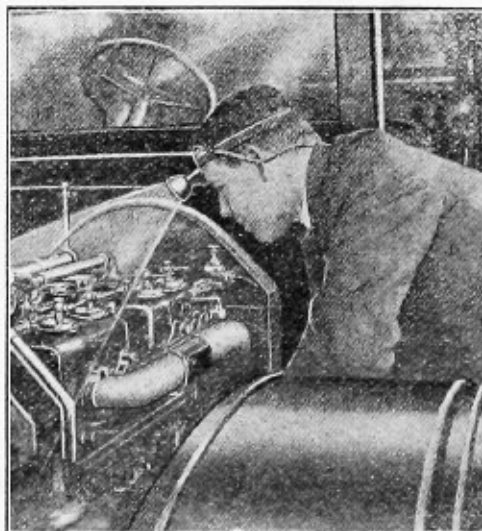


2499

Indispensable to the repairman when work-
ing under an automobile. Has padded head
rest made of spring wood slats, built on
light running casters. So the user working
under a car can, while working on his back,
pull himself to any part of the car.

No. 2499. Regular Price, \$2.50. Cash
Price, \$2.25.

ALBINO TROUBLE SEARCHING LAMP. With Elastic Band to go Around the Head.



633

Attached to the forehead, they project the
light just where wanted, thus enabling the

PERFECT SOCKET CONNECTOR.



CLOSED



OPENED

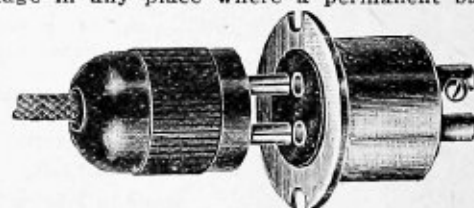
585

It is very useful around an auto or boat.
A simple and perfect connection for electric
lamps. Saves detaching wiring and serves
as a switch.

No. 585. Complete, Price 25c. Cash Price,
18c.

FLUSH MIDGET SEPARABLE CONNECTOR.

This handy device can be used to advan-
tage in any place where a permanent bat-

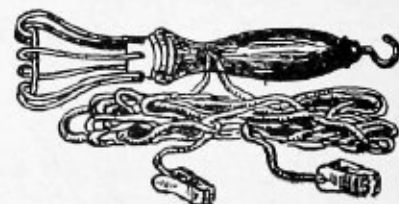


2361 (Cut full size).

tery connection is desired and is always
ready for service by inserting the plug. The
base can be inserted in a ¼-inch hole and
the plug end to miniature lamp, either
portable or stationary, or any other appar-
atus desired.

Wires fastened to end with set screws.
No soldering of wires necessary.
No. 2361. Regular Prices, 50c. Cash Price,
39c.

ELECTRO TROUBLE LAMP.



2387

This can be attached to four dry cells
or to any 6-volt storage battery. The outfit
is complete with lamp guard and 6 foot of
lamp cord and terminals on the end for at-
taching to battery and 6 volt 4 candle power
lamp.

No. 2387. Regular Price, \$1.00. Net Cash,
85c.

Tungsten bulb, 45c. extra.

Carbon bulb, 28c. extra.

use of both hands at your work. Can be
attached to the regular ignition battery of
your car or with 4 dry cells, complete with
10 ft. of cord and 4 or 6 volt lamp.

No. 633. Cash Price, \$2.00.



1379

No.	Dimensions			Weight.	Capacity		List Price.	Cash Price.
	Length.	Width.	Height.		Amp. Hrs.	Volts.		
1379	4	x 7 1/4	x 8 3/4	13 lbs.	20	6	\$14.00	\$10.50
1380	3 1/4	x 7 1/4	x 8 3/4	13 lbs.	40	4	12.50	9.00
1381	4 1/4	x 7 1/4	x 8 3/4	19 lbs.	40	6	17.50	13.00
1382	5 1/4	x 7 1/4	x 8 3/4	25 lbs.	40	8	22.00	16.50
1383	3 3/4	x 7 1/4	x 8 3/4	17 lbs.	60	4	16.00	11.75
1384	5 1/4	x 7 1/4	x 8 3/4	25 lbs.	60	6	20.00	12.50
	7 1/4	x 7 1/4	x 8 3/4	33 lbs.	60	8	26.00	19.50
1386	5 1/4	x 7 1/4	x 8 3/4	24 lbs.	80	4	20.00	15.00
1387	8	x 7 1/4	x 8 3/4	35 lbs.	80	6	29.50	22.00

EVER READY DRY CELLS.

These batteries are giving perfect satisfaction to their users. They have marvelous recuperative powers, as well as powerful voltage and long life.

No. 1395. Height, 6 in.; width, 2 1/2 in. Regular Price, 25c. Cash Price, 20c.



1395

HIGHEST GRADE WASTE. Not the Common Mixture Usually Offered. LONG THREAD WHITE WASTE.



1190

No.	Quantity.	Regular Price.	Cash Price.
1190	1 lb. bag	\$0.20	\$0.14
1189	1 lb. bag	.75	.70
1188	25 lb. bale	4.00	2.75
1187	100 lb. bale	12.50	10.50

Prepared and packed by us especially for auto work. Excellent for delicate machinery and polished, highly finished wood and metal surfaces.

1910 GEISZLER STORAGE BATTERY IGNITER Guaranteed One Year

The original and only guaranteed non-sulphating storage battery made. As a reliable source of ignition, this is unreservedly the best storage battery manufactured. Guaranteed to give satisfaction.

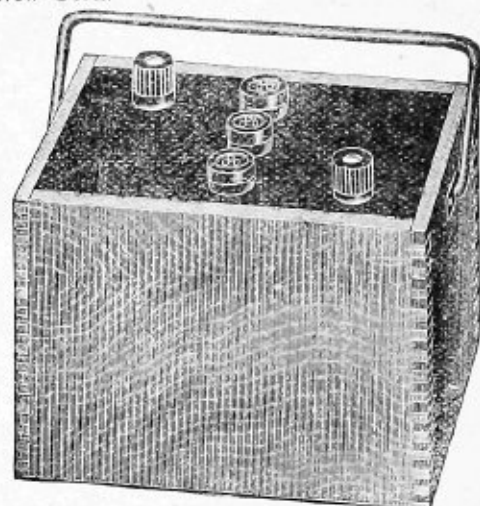
All materials used in these batteries are of the highest grade obtainable. The terminal binding nuts are made of German silver, which resists the action of acid much better than steel or brass. They fold down when not in use. Every detail, even to the smallest part, embodies the highest degree of electrical and mechanical workmanship.

The manufacturers claim and guarantee the Geiszler Storage Battery possesses the exclusive feature of non-sulphation.

During the season of 1908 we sold more Geiszler Batteries than all the other makes combined. It gave better satisfaction than any other battery, regardless of price. We can thoroughly recommend it and guarantee it for one year. The Geiszler Battery will run your car from 1,200 to 1,500 miles on one charge.

THE SPECIAL WILCO STORAGE BATTERY.

Specially made for us by Geiszler Bros. of New York.



2428

This battery has the regular Geiszler non-sulphating plates, but is put up in a cheaper form. The case is made of wood. Between the hard rubber inside case and the wood is filled in with a cushion of pitch. It is fitted with non-slop acid plugs and guaranteed for one year.

No. 2428. 4 volt, 60 amp., 4 1/4 x 8 1/4 x 9 1/4. Reg. Price, \$13.00. Cash Price, \$6.50.

No. 2429. 6 volt, 60 amp., 6 1/4 x 8 1/4 x 9 1/4. Reg. Price, \$15.00. Cash Price, \$7.50.

"WILCO" RUST REMOVER.

For preventing rust from accumulating in the water chambers of the radiator and to keep the water in circulation from becoming rusty we advise using our R. R. R. Radiator Rust Remover.



644

rust is surprising. It accomplishes more in five minutes than a repair man can do in five hours. Put up in 8 oz. cans.

No. 644. List Price, 75c. Cash Price, 35c.

PERFECT DROP BRAKE. May Save Your Life.



1125

This wonderful device has prevented many an accident caused by trouble with deranged machinery, brakes failing to work, broken chains, etc., occurring while ascending hills or mountains. The brakes or sprags are attached to rear axle, and in case of trouble they are dropped, bringing the car to a

THE GEISZLER MIDGET NON-SULPHATING STORAGE BATTERY.



1388

Midgets are especially designed for reserve ignition and motor cycle work. They are made with a semi-dry electrolyte, thus entirely eliminating spilling of acid.

They are the same size as the No. 6 Dry Cell, have 30 ampere hour capacity at 2 volts each, and are positively guaranteed.

Midgets can be recharged by any one doing storage battery recharging at about 15c. per cell, depending upon locality, and each recharge will outlast 3 sets of dry cells.

No. 1388. List Price, \$2.50 per cell. Cash Price, \$2.00.

standstill instantly. A wise driver will appreciate the value of this little device. They never fail to work.

No. 1125. For 28 to 32 in. wheels. Price, \$4.00 per pair. Cash Price, \$3.20.

No. 1124. For 34 and 36 in. wheels. Price, \$5.00 per pair. Cash Price, \$3.90.

List Prices on Guaranteed Shoes and Inner Tubes

All Standard Makes

Subject To Change Without Notice

WRITE FOR OUR CASH DISCOUNTS

Goodyear, Morgan & Wright, Hartford, Continental, Goodrich and Diamond. Regular Clincher, Quick Detachable Clincher and Straight Side Dunlop Styles.									Michelin. Regular Clincher and Wire Base. Straight Side Dunlop Styles.			FISK.						
Size.	All of Above Makes.		Nobby Tread. M. & W. Only.	Midgeley Tread. Hartford Only.	Traxion Tread. Continental Only.	Type Course. Heavy Car Type. Continental Only.	Metal Studded. Non-Skid.	Inner Tubes. All of Above Makes.	Plain. Round.	Anti-Skid. Clincher Only.	Inner Tubes.	Bolt-On Type Diamond or Fisk.			Regular Clincher and Quick Detachable Clincher.		Straight Side Dunlop Style.	
	Plain. Round.	Bayley Tread.										Bolt-on. Heavy Car Type.	Bolt-On. Bayley Tread.	Inner Tubes for All Fisk Shoes.	Plain. Round.	Bayley Tread.	Fisk. Dunlop. Plain.	Fisk. Dunlop. Bayley Tread.
26x2 1/2	\$11.25A	\$12.20A						\$2.75A										
28x2 1/2	12.10B	13.10B						3.00B										
26x3	13.40C	14.90C						3.20C										
28x3	14.50	16.10		18.30	16.25			3.40	\$14.63	\$21.85	\$4.32	\$19.55	\$21.65	\$3.80	\$16.30M	\$18.05M		
30x3	15.50	16.95		19.70	17.30			3.65	15.58	23.27	4.50	21.00	23.05	4.00	17.50M	19.20M	\$17.50	\$19.20
32x3	16.60	18.00	19.65	21.00	18.35			3.95	16.62X		4.65				18.65M	20.40M		
34x3	17.55	19.05		22.30				4.15	17.67X		4.85				19.85M	26.55M		
28x3 1/2	18.40D	20.25D		23.45				4.45D				22.30	26.10	5.00				
28x3 1/2	21.25E	23.25E		27.00	23.65			4.65E				25.85	29.25	5.15				
29x3 1/2	22.05A	24.05A						4.80A										
30x3 1/2	22.85	24.90	27.05	29.05	25.30	\$28.60	\$32.75	4.95	22.95	30.40	5.70	27.90	30.35	5.50	23.25	25.30	23.25	25.30
31x3 1/2	23.70B	25.60B		30.00				5.05B							24.00M	26.05M		
32x3 1/2	24.40	26.40	28.80	30.75	26.80	30.40	34.95	5.20	24.55	32.55	5.95	29.55	32.00	5.80	24.60	26.80	24.60	26.80
33x3 1/2	25.45F	27.50F	30.05					5.35F							25.75M	27.85M		
34x3 1/2	26.55	28.55	31.35	33.60	28.95	33.10	37.95	5.55	26.79	35.38	6.32	32.30	34.75	6.20	26.90	28.95	26.90	28.95
36x3 1/2	28.75	30.70	34.15	36.30	31.15	35.85		5.80	28.97	38.70	6.75	34.90	37.35	6.60	29.05	31.15		
30x4	32.80	35.50	38.90	41.25	35.80			6.40	32.49X	42.13	7.22	34.70	37.55	7.05	33.05	35.80		
31x4	34.10	36.70	41.15	42.80	37.00	43.50		6.60	33.87		5.70	35.95	38.85	7.30	34.25	37.00	34.25	37.00
32x4	35.30	37.95	41.80	44.40	38.15	44.15	45.10	6.75	34.96	45.36	7.75	37.30	40.05	7.50	35.50	38.15	35.50	38.15
33x4	36.55	39.30	43.40	46.00	39.40	45.85		6.95	36.05X		5.95	38.65	41.40	7.70	36.80	39.40	36.80	39.40
34x4	37.75	40.30	44.75	47.50	40.55	47.25	48.30	7.15	37.25	48.60	8.17	39.90	42.60	7.90	38.00	40.55	38.00	40.55
35x4	38.95	41.55	46.20	48.95	41.75			7.30	38.24X		6.32				39.15	41.75	39.15	41.75
36x4	40.25	42.85	47.60	50.50	43.05	50.30	51.50	7.50	39.61	51.63	8.75	42.45	45.25	8.35	40.40	43.05	40.40	43.05
37x4	41.35G	44.00G		44.30				7.65G	40.70X		6.75				41.55	44.30		
40x4	45.05	47.80	23.45	56.60	48.32	56.50		8.25	45.36X		9.50	47.60	50.75	9.20	45.30	48.30		
42x4	47.55H	50.15H	56.40		50.90			8.65H	48.02X		9.93	50.05	53.45	9.70	47.65	50.90		
32x4 1/2	45.00	48.25		56.55	48.40			8.30	44.80	57.70	10.35	47.50	50.85	9.20	45.20	48.40	45.20	48.40
34x4 1/2	47.85	51.10	56.25	60.15	51.30	59.90	61.10	8.85	48.02	61.27	10.92	50.50	53.85	9.75	48.10	51.30	48.10	51.30
35x4 1/2	49.30	52.50	58.35	61.95	52.75			9.05							49.55	52.75		
36x4 1/2	50.75	53.95	60.05	63.75	54.25	63.45	64.80	9.30	50.25	65.02	11.59	53.55	56.95	10.35	51.00	54.20		
37x4 1/2	52.15	55.40	62.80	65.55	55.70			9.60							52.40	55.70		
38x4 1/2	53.60	56.95	63.50	67.30	57.20	67.00		9.85	53.53X	68.83	12.25	56.55	60.05	11.00	53.85	57.20		
40x4 1/2	56.45J	59.55J		71.00	59.85	70.65		10.30J				59.60	62.85	11.55	56.75	59.85		
42x4 1/2	59.25	62.55	70.65	74.50	62.80	74.20		10.85	60.09X	75.62	13.43	62.55	65.95	12.15	59.60	62.80		
34x5	58.90	62.90		74.10	63.25	73.80	71.45	10.35	57.96X	77.37	10.92	59.30	63.25	11.45	59.30M	63.25M		
35x5	60.65	64.65	71.85	76.25	65.00	75.25		10.70	59.52X	80.42	10.92				61.00	65.00		
36x5	62.30	66.30	73.85	78.30	66.65	77.95	75.15	10.90	61.18X	82.98	11.59	62.65	66.65	12.05	62.65	66.65		
37x5	64.00	68.00	75.90	80.40	68.35	79.20	77.15	11.30	62.79X	85.50	11.59				64.35	68.35		
41x5	70.75A	74.85A						12.35A							70.90	75.30		
43x5	74.10F	78.30F	87.90					12.95F										
36x5 1/2	72.70K	77.50K		91.45	77.95	91.10		12.45K							73.10	77.95		
37x5 1/2	74.75	79.00	88.60	93.95	79.95			12.70							75.15	79.95		

For Net Cash Prices on Congo Guaranteed Tires See Next Page

X—These sizes of Michelin shoes not made in straight Side Dunlop style.
 A—Made by Goodrich and Diamond only.
 B—Not made by Continental.
 C—Made by Goodyear and Diamond only.
 D—Not made by Continental or Goodyear.

E—Not made by Goodyear.
 F—Made only by M. & W., Goodrich and Diamond.
 G—Not made by Hartford or M. & W.
 H—Not made by Goodyear or Hartford.
 J—Not made by Goodyear or M. & W.

K—Not made by Morgan & Wright.
 M—Not made in Quick Detachable Clincher style.
 N—Made only in Quick Detachable Clincher style.

"TOMORROW IS THE DAY THAT NEVER COMES." ORDER NOW.



1912 First Quality

"Higrade" Tough Tread Shoes

TRADE MARK BRAND

The Same Shoe With or Without a
Mileage Guarantee



GOOD COMMON SENSE TIRE TALK

NOTHING SUCCEEDS LIKE SUCCESS. THE HIGRADE SHOE IS A PHENOMENAL SUCCESS

Money Saved Is Money Made

After another season's experience with the "Higrade" shoe we know we have a money-saver and a money-maker for all who use this shoe. Our Mr. Willis introduced the first pneumatic tire into the United States in 1890, and has been using and selling them since that time and consequently has learned a great deal about tire construction. His knowledge and experience of the last 22 years has helped us to get a shoe made that could be sold at a reasonable price without the usual mileage guarantee and have the purchaser satisfied.

We have sold several thousand of these "Higrade" shoes during the past two seasons without a mileage guarantee and in most cases have received duplicate orders from the purchaser or his friends, with the general comment that they stood up better than the average guaranteed shoe.

When you buy one of the regular high priced guaranteed shoes you pay about 50 per cent. for the guarantee and get 50 per cent. tire for your money. We offer you the "Higrade" shoe at a price based on the actual cost of making a first-class shoe with a reasonable profit added, so that you get 100 per cent. value when you buy a "Higrade" shoe.

Order one when you want a shoe, or on our guarantee to refund your money if same upon arrival and examination is not in every way satisfactory, or without any deposit you can order them sent C. O. D. with the privilege of examination—if it is in every way satisfactory, pay the Express agent, if not, return at our expense.

We know the automobile public has been "stung" badly with cheap, worthless second-grade shoes in the past, but why buy from "Mushroom" Tire Companies that spring up every day and deal in cheap, worthless shoes that they can have made up at any old price. They ask you for a 10 per cent. deposit with your order. This deposit covers the express charges, and they take no risk if you don't accept the shoes they send. Do you think you get your deposit back?

Where a customer really wants a shoe we are satisfied to risk the express charges because we have confidence in our goods.

"Higrade" shoes are made in Regular Clincher, Quick Detachable Clincher and Straight Side (Goodyear Type) Dunlop style, as illustrated below. Be sure to state style wanted. Our Net Cash prices are as follows, and you will note that we save you from 27 per cent. to 45 per cent. when you buy them without a mileage guarantee:

To avoid mistakes, expense and delay when ordering, please state the particular style of rim you want tires for.

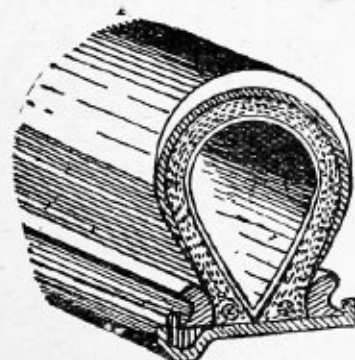
Size.	Regular List Prices.	Clincher and Clincher Q. D.	Dunlop or Straight Side.	Floating Flaps.
28x3	\$11.50	\$9.65	\$10.15	\$1.00
30x3	15.50	10.60	11.15	1.00
32x3	16.60	11.55	12.15	1.00
30x3½	22.85	14.10	15.10	1.00
31x3½	23.70	14.95	15.70	1.00
32x3½	24.10	15.45	16.20	1.00
34x3½	26.55	16.75	17.60	1.00
30x4	32.80	19.10	20.05	1.10
31x4	34.10	19.90	20.90	1.10
32x4	35.20	20.60	21.65	1.10
33x4	36.55	21.50	22.60	1.10
34x4	37.75	22.05	23.15	1.10
35x4	38.95	22.70	23.85	1.10
36x4	40.25	23.50	24.70	1.10
32x4½	45.00	26.30	27.60	1.10
34x4½	47.85	28.00	29.40	1.15
35x4½	49.30	28.75	30.20	1.15
36x4½	50.75	29.60	31.10	1.15

Note.—If you prefer to buy these same shoes with a guarantee we will sell them to you with a 3,500-mile guarantee at prices 15 per cent. under the Regular List Prices quoted above.

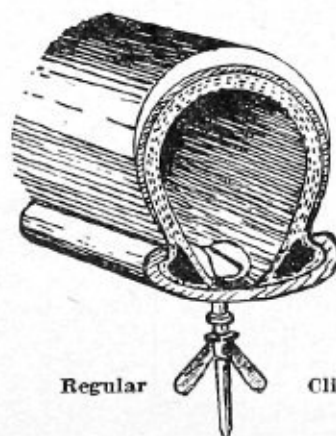
Use larger tires and save tire troubles.

Sizes marked X are interchangeable as follows:

29x3½ shoes will fit 28x3 Rims	35x4½ shoes will fit 34x4 Rims
31x3½ shoes will fit 30x3 Rims	33x4½ shoes will fit 32x4 Rims
31x4 shoes will fit 30x3½ Rims	35x5 shoes will fit 34x4½ Rims
33x4 shoes will fit 32x3½ Rims	37x5 shoes will fit 36x4½ Rims
35x4 shoes will fit 34x3½ Rims	



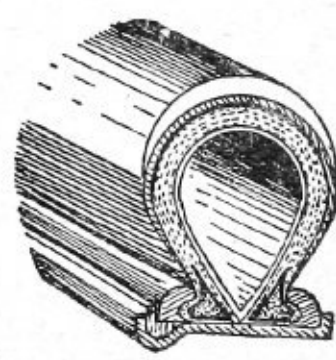
Straight Side Dunlop Style.



Regular



Clincher.



Quick Detachable Clincher Style.

REMEMBER WE PREPAY EXPRESS CHARGES ON ALL \$10.00 ORDERS. FOR CONDITIONS, SEE INSIDE FRONT COVER.

OUR PROFIT SHARING TIRE PROPOSITION ON CONGO AUTOMOBILE TIRES

They Stand for Tire Evolution and Mark the Arrival of Fully Guaranteed Tires
As Good as the Best at the Price of Seconds

For the past six months we have been testing the Congo tires, subjecting them to the hardest kind of tests. These have proven to our satisfaction that the Congo is by far the best tire we have ever seen. One Congo shoe on our test car ran 5,800 miles before it wore down to the breaker strip; this shoe was recovered at a small cost and has run 1,200 miles and was still in use at the time of going to print.

Our many years of experience in the tire business and consequently our extensive knowledge gained in handling all makes and kinds of tires has helped us in our decision to thoroughly recommend the Congo tires to our patrons. Our Mr. E. J.

Willis introduced the first pneumatic tire in this country from England in 1889 and has been using and selling them ever since, and he says it is the best built tire, and in his belief will wear better than any other tire made.

The reason for our ability to sell the Congo tires at greatly reduced prices is from the fact that we sell direct from the Manufacturers to the Consumers and eliminate all the profits of the Manufacturers' Agents, Manufacturers' Branch Stores, Jobbers and Dealers, each one has to get some profit, consequently, the Automobile Public has had to pay exorbitant profits for reliable tires. So when you purchase Congo Tires from us, you share in the profits heretofore made by others.

Our enormous tire business enables us to take the entire output of the Congo Tire & Rubber Company; we confidently expect to sell over a million dollars' worth this season. Thus you will see the Manufacturers don't have to add to the price of the tires for selling expense. These advantages must be apparent to you.

We believe the Congo tire will give as big a mileage service as any tire on the market, and by special arrangement with the Manufacturers we are authorized to make replacements to our customers where the Congo Tires have not given entire satisfaction. All such replacements will be made on a basis of 2,500 miles of service. This basis of adjustment is not an indication of the probable life of the tire, for we confidently believe the Congo Tire will give as good mileage service as any tire made, no matter what the price paid.

We prepay Express Charges and send C. O. D. with privilege of Examination. All orders amounting to \$10.00 and over we prepay express charges anywhere within 500 miles of New York; beyond this we allow Express up to 500 miles. You can order without any deposit goods to be sent C. O. D. with privilege of examination, and if they are not entirely satisfactory you are under no obligation to accept them, and they can be returned at our expense. We are willing to take this risk because we know our goods and prices are right.

WE ISSUE AUTOMOBILE LICENSES FOR THE STATE OF NEW JERSEY

Congo Tires are made of best rubber procurable in the world's market. No substitute or reclaimed rubber or shoddy is used in their construction.

Congo Tires represent the latest and most modern construction in tire building.

Every purchaser of a Congo Tire is sharing in the big saving made and getting a better tire for the money and saving the Jobbers' and Dealers' Profits, and our profit sharing prices deserve more than investigation. They are worthy a trial.

Congo Pure Gum Tubes Fully Guaranteed

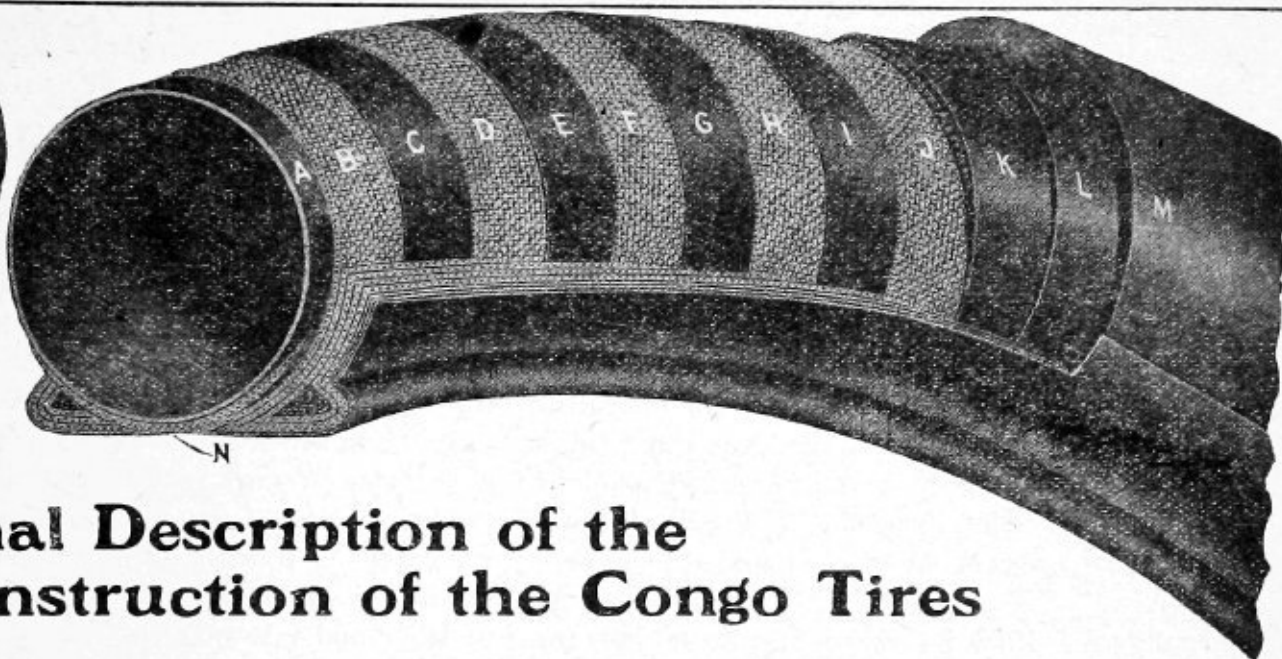
Congo Tubes are made of highest grade Rubber to be found in the world's market. Most Tubes are weak around the valve. Not so in Congo. An extra heavy reinforcement of Rubber and fabric, of good liberal size will be found on every Congo Tube. A cheap Inner Tube is a poor investment, the Tube is the Heart of the Tire, so cut down your Tire expenses by using Congo Inner Tubes. Congo Tubes are made of heavy Rubber, consequently weigh more and cost more than other Tubes.

Profit Sharing Net Cash Prices on Congo Shoes and Tubes.

Made in Dunlop (Straight Side), Clincher Quick Detachable or Regular Clincher style. When ordering be sure and state which style wanted.

In Effect Feb. 15, 1912. Prices Subject to Change Without Notice

Size.	Congo Round Treads.		Congo Anti-Skid.		Congo Pure Gum Guar.
	Regular Clincher style.	Clincher Q. D. and Dunlop straight side Quick Detachable styles.	Regular Clincher style.	Q. D. Clincher and Dunlop straight side Quick Detachable styles.	Tubes. Made of heavy Rubber. For all styles of shoes and will fit any make.
28 x 3	\$11.00	....	....	....	\$2.65
30 x 3	12.00	....	....	....	2.80
32 x 3	13.00	....	....	....	2.95
30 x 3 1/2	16.00	\$16.80	\$17.60	\$18.48	3.85
31 x 3 1/2	16.50	....	....	....	3.95
32 x 3 1/2	17.00	17.85	18.70	19.63	4.05
34 x 3 1/2	18.00	18.90	20.79	21.75	4.20
30 x 4	21.50	22.57	23.75	....	4.75
31 x 4	22.25	23.36	24.45	25.67	4.90
32 x 4	23.00	24.15	25.35	26.61	5.10
33 x 4	23.75	24.93	26.35	27.66	5.30
34 x 4	24.50	25.72	27.35	28.71	5.50
35 x 4	24.95	26.20	28.35	29.77	5.65
36 x 4	26.00	27.30	29.35	30.81	5.80
34 x 4 1/2	31.75	33.00	35.00	36.50	6.55
35 x 4 1/2	32.75	34.25	36.00	37.50	6.70
36 x 4 1/2	33.75	35.25	37.00	38.50	6.85
37 x 4 1/2	34.75	36.25	38.00	39.50	7.00
34 x 5	....	....	....	....	7.75
35 x 5	42.00	43.50	46.50	48.00	8.00
36 x 5	43.00	45.15	47.30	49.00	8.15
37 x 5	44.50	46.00	48.50	50.00	8.25

CROSS SECTION
OF THE CONGONOTE THE
EXTRA HEAVY
CUSHION

Additional Description of the Construction of the Congo Tires

- A—Congo Pure Gum heavy weight Inner Tube for strength and durability, it has no equal; each tube is fully guaranteed.
B—Layer of 17½ oz. selected Sea Island Cotton Fabric, thoroughly impregnated with pure rubber friction cut on the bias.
C—Layer of pure rubber, the finest the world produces; these layers of rubber between each layer of fabric are bound together in vulcanization.

D—Layer of 17½ oz. selected Sea Island Cotton Fabric cut on the bias; the start of this layer is started directly opposite to layer B; each layer has a big overlap.

E—Layer of pure rubber; same as layer C.

F—Layer of 17½ oz. selected Sea Island Cotton Fabric cut on the bias same as layer B. Each layer has a tensile strength of over 450 pounds.

G—Layer of pure rubber specially made to thoroughly unite the two layers of fabric together when vulcanized.

H—Layer of 17½ oz. selected Sea Island Cotton Fabric; the laps being started at a different place each time thoroughly distributes the strain evenly and eliminates any weak spots in the tire.

I—Layer of Pure Rubber, same as layer C.

J—Layer of 17½ oz. selected Sea Island Cotton Fabric; thoroughly impregnated with pure rubber friction; this not only helps to unite the rubber layer to the fabric, but it makes it water-proof and preserves it against deterioration.

K—This is known as the Cushion and Breaker Strip. The Cushion of any tires is the Shock Absorber between the tread and the first layer of fabric; this soft cushion is made from strictly pure rubber of the finest quality known and of good liberal thickness because our twenty years of Tire experience has positively demonstrated to us that the Cushion is the most vital part of the tire. If it is made of soft pure rubber of good thickness the fabric of the tire is protected against stone bruises and jolts going over car tracks and other dangerous shocks and likewise it so cushions the tread of the tire that it cannot possibly become loosened from the fabric, and at the same time cannot become sand blistered.

The breaker strip in the cushion is made of a very loosely woven Sea Island Fabric of selected strength, which is thoroughly impregnated and coated both sides with pure rubber; this breaker strip is put into the tire as an additional shock absorber and to make a perfect bond between the tread and the cushion.

L—This is known as the binder; this is made of special selected and compounded rubber which forms the outside lower wall of the tire and goes clear around the fabric and over the cushion; this is made of a light gray colored rubber of special composition which makes the tread adhere with great tenacity to the breaker strip.

M—This is known as the Tread; the rubber used in the tread is the result of years of experimenting and has proven to be the toughest and smoothest wearing rubber tread ever put on a tire. This tread is of white rubber and is the result of a combination of the world's best and toughest rubber compounded by a secret process, making altogether the best wear resisting tread and at the same time one of the softest and most resilient tires on the market.

N—This is known as a floating flap; this is endless and furnished only with Q. D. Clincher style casings. It is necessary on Q. D. Casings to keep the Inner Tube from getting down under and between the edges of shoes which will ruin the Tube.



CONGO ANTI-SKID TIRES.

(For Prices See
Preceding Page.)

For full detail description of the construction of this Tire see sectional cut at head of page. The only difference between the Congo Round Tread casing and the Congo Anti-Skid Casing is that the X's and bars on the tread of the Anti-Skid are all added raised rubber. They not only give more traction and prevent skidding but add considerable wearing thickness to the tread. As an Automobile Anti-Skid Tire it stands "Pre-eminent." It was the sensation of the 1912 Automobile Show and more talked of than any other Anti-Skid Tire ever put on the market. It marks the arrival of the first real Anti-Skid tire and at the profit sharing prices we are offering these Tires at, they are bound to become the most popular tire of 1912.

WILCO HIGH GRADE

Guaranteed Automobile Tubes at 30% Reductions

These tubes are made by one of the largest rubber factories in the country. They do not make automobile casings, but they do make the finest and highest grade rubber goods in the world.

We were fortunate enough to get them interested during the year 1910 and they made us some tubes that we tested thoroughly, and after making minor changes they succeeded in producing the finest inner tube we have ever seen. We have handled them ever since.

The tube for 1912 has been improved and for *Durability, Hard Service and Quality* it is second to none.

Our economical method of handling merchandise enables us to offer you these high grade tubes at an actual saving of 30 per cent. from the prices asked for the regular standard tubes. This is possible because the manufacturers buy the pure Para gum in the largest quantities and at the lowest prices. They are not obliged to put a fancy profit on the cost of manufacturing to pay for extensive advertising, and to pay for extensive branch stores all over the country.

They charge us only a legitimate profit on the cost of labor and raw material, and we in turn sell them to you at only a fair profit—hence the following extremely low prices:—

Size.	List Price.	Saving.	Net Cash Price.	Size.	List Price.	Saving.	Net Cash Price.
28 x 3	.....\$3.45	30%	\$2.41	32 x 4 1/2	..... 8.35	30%	5.84
30 x 3	..... 3.65	30%	2.55	34 x 4 1/2	..... 8.90	30%	6.23
32 x 3	..... 4.00	30%	2.80	35 x 4 1/2	..... 9.20	30%	6.44
30 x 3 1/2	..... 5.00	30%	3.50	36 x 4 1/2	..... 9.40	30%	6.58
32 x 3 1/2	..... 5.25	30%	3.67	37 x 4 1/2	..... 9.75	30%	6.82
34 x 3 1/2	..... 5.65	30%	3.95	38 x 4 1/2	..... 10.00	30%	7.00
36 x 3 1/2	..... 6.00	30%	4.20	40 x 4 1/2	..... 10.50	30%	7.35
30 x 4	..... 6.40	30%	4.48	42 x 4 1/2	..... 11.05	30%	7.73
31 x 4	..... 6.65	30%	4.65	34 x 5	..... 10.40	30%	7.28
32 x 4	..... 6.80	30%	4.76	35 x 5	..... 10.80	30%	7.56
33 x 4	..... 7.00	30%	4.90	36 x 5	..... 10.90	30%	7.66
34 x 4	..... 7.20	30%	5.04	37 x 5	..... 11.40	30%	7.98
35 x 4	..... 7.40	30%	5.18	36 x 5 1/2	..... 12.40	30%	8.68
36 x 4	..... 7.60	30%	5.32	37 x 5 1/2	..... 12.75	30%	8.92
37 x 4	..... 7.75	30%	5.42	38 x 5 1/2	..... 13.15	30%	9.20
40 x 4	..... 8.35	30%	5.85	37 x 6	..... 14.60	30%	10.22
42 x 4	..... 8.80	30%	6.16	39 x 6	..... 15.15	30%	10.60

Remember we are saving you 30 per cent., at the same time giving you the best inner tube that money will buy, together with the same guarantee that you get with the Regular Standard Goods.

**AT 30% TO 42%
REDUCTIONS**

First Quality 1912 New Construction

**AT 30% TO 42%
REDUCTIONS**

Pure White Rubber Tread Guaranteed

GENUINE IMPERIAL SHOES

Beware of the Several Cheap Imitations Sold Under This Name

The New 1912 Style Imperial Shoes are equal in quality and durability to any make on the market. The manufacturers have tested this New Constructed Shoe for the past five months; they have had special fabric made and are now putting a white pure rubber heavy tread on this new shoe which is very tough and resilient. We have had some trouble with the gray rubber tread 1911 Imperial Shoes, but we have made amicable adjustments with all our customers where they did not give a satisfactory mileage. Before we decided to offer this New Constructed 1912 Imperial Shoe we satisfied ourselves that it was everything the manufacturer claimed for it; **we are now so sure that we have one of the best tires on the market**, and as good in every way as tires selling at nearly double the price, that we have decided to sell the New 1912 Imperial Shoes with a mileage guarantee or without and give our customers the choice of buying it either way. It will be the same shoe; we only have one quality, that is the regular first quality, new, fresh 1912 construction, white tread goods. Should you decide to buy the above without the mileage guarantee, we don't want you to feel that you are running any great risk, as the manufacturers absolutely guarantee these New 1912 Imperial Shoes against mechanical imperfections, and also to give reasonable service.

This unheard-of arrangement with a factory manufacturing a shoe that sells for about half the usual price should induce automobile owners to at least try one shoe and be convinced that they are getting more than their money's worth.

We know the automobile public has been "stung" badly with cheap, worthless, second-grade shoes in the past, but why buy from "Mushroom" tire companies that spring up every day, and deal in cheap, worthless shoes that they can have made up at any old price? They ask you for a 10 per cent. deposit with your order. This deposit covers the express charges, and they take no risk if you don't accept the shoes they send. Do you think you get your deposit back?

You can order the above shoes sent C. O. D. with privilege of examination. No deposit is necessary. If it is in every way satisfactory pay the express company. If not, tell the express company to return it to us. You risk nothing, we risk the express.

Where a customer really wants a shoe we are satisfied to risk the express charges because we have confidence in our goods.

For Regular Clincher, or Q. D. Clincher Rims Only

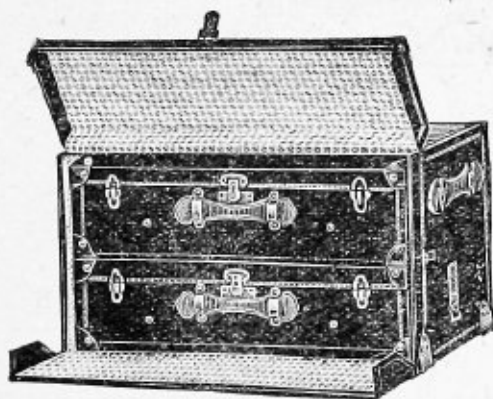
All the Same Price

PRICES AS FOLLOWS:

Regular Price		Guaranteed on 3500-mile basis, we assume mileage risk		The same shoe sold without specific guarantee	
28x3	\$14.50	net cash price	\$13.00	net cash price	\$9.65 you save over 30%
30x3	15.50	net cash price	13.95	net cash price	10.60 you save over 30%
32x3	16.60	net cash price	14.94	net cash price	11.55 you save over 30%
30x3 1/2	22.85	net cash price	20.57	net cash price	14.40 you save over 35%
31x3 1/2	23.70	net cash price	21.33	net cash price	14.95 you save over 35%
32x3 1/2	24.10	net cash price	21.69	net cash price	15.45 you save over 35%
34x3 1/2	26.55	net cash price	23.90	net cash price	16.75 you save over 36%
30x4	32.80	net cash price	29.52	net cash price	19.10 you save over 40%
31x4	34.10	net cash price	30.69	net cash price	19.90 you save over 40%
32x4	35.20	net cash price	31.68	net cash price	20.60 you save over 40%
33x4	36.55	net cash price	32.90	net cash price	21.50 you save over 40%
34x4	37.75	net cash price	33.98	net cash price	22.05 you save over 40%
35x4	38.95	net cash price	35.06	net cash price	22.70 you save over 40%
36x4	40.25	net cash price	36.23	net cash price	23.50 you save over 40%
32x4 1/2	45.00	net cash price	41.00	net cash price	26.30 you save over 41%
34x4 1/2	47.85	net cash price	43.07	net cash price	28.00 you save over 41%
35x4 1/2	49.30	net cash price	44.37	net cash price	28.75 you save over 41%
36x4 1/2	50.75	net cash price	45.68	net cash price	29.60 you save over 42%

Remember we prepay express charges on all shoes to points not over 500 miles from New York, and allow expressage to the 500-mile point on all orders shipped beyond that distance.

NEWPORT AUTO TRUNK.



671

The body of trunk is made of good quality bass wood, covered with black enamel duck. Bound with black sole leather, hand stitched. Fitted with brass lock and catches. Inside of trunk are two well made suit cases to match, size 15x7½ in. The cases can be removed without unstrapping trunk from rack.

No. 671. Size, 28x15x15½ in. Complete, List Price, \$35.00. Cash Price, \$19.50.

No. 672. Size, 30x15½x16. Complete, with two dress suit cases. List Price, \$40.00. Cash Price, \$22.50.

No. 673. Size 32x16x16½ in. Complete, with two dress suit cases. List Price, \$45.00. Cash Price, \$26.50.

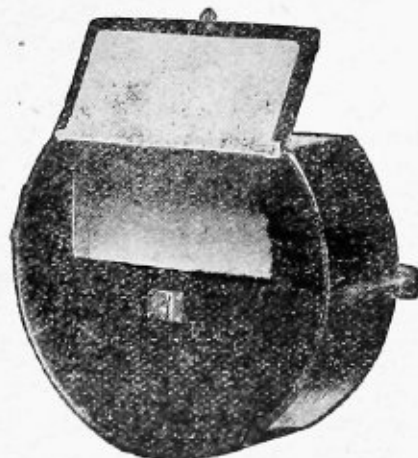
No. 674. NOTE—We can furnish above trunk in any of above sizes fitted with three inside suit cases, 4 in. deep, for \$1.50 extra.

No. 675. Slip covers for above, any size, made of rubber covered heavy cloth, \$3.25 extra.

TUXEDO TIRE TRUNK.

Nine Inches Deep.

When ordering give size of your tire.



2139

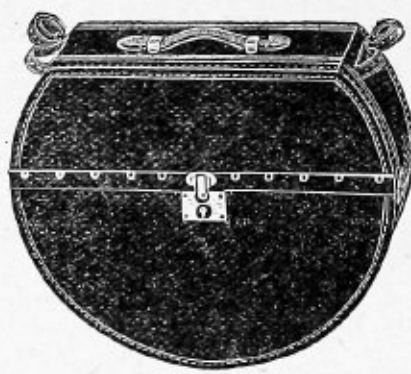
The body is made of kiln dried Basswood. Covered with black waterproof duck.

A strong, light-weight and inexpensive trunk. The door, stitched to the top with a heavy leather hinge, is fitted with the interlocking cushion. (Patent pending.)

Being made with a flat top it will fit either clincher or demountable rims.

No. 2139. Regular Price, \$10.00. Cash Price, \$5.00.

WILCO DEMOUNTABLE WHEEL TRUNK.



679

This trunk is especially adapted for demountable rim tires. It is cut off sufficiently at top to allow space for the valve. A strong leather handle being on top makes the trunk easy to carry and can also be used as a suit case. The front and back are made of bass-wood, the sides of the best trunk board. All covered with black enameled duck, well bound and hand stitched. Is fitted with brass suit case lock and catches. Has proper straps for fastening to shoes. Is absolutely dust and waterproof.

No. 679. Demountable, 9 in. deep. For any size tire up to 36x5. List Price, \$12.00. Cash Price, \$7.25.

When ordering give size of your tire.

ENAMELED DUCK TIRE TRUNKS.

To Go Inside of Spare Casings.



676

Exceptionally well-made black enameled, bound in leather.

Equipped with straps for fastening inside of tire as shown, also substantial lock which makes contents perfectly secure. An excellent device for carrying necessary articles used while touring. 9 inches deep.

No. 676. For any size tire from 28x3 to 36x5 in.

List Price, \$7.50. Cash Price, \$3.95.

No. 677. Made in green, maroon, grey or blue. Cash Price \$1.50 extra.

In ordering trunks use the following scale for sizes:

For Tires	Use Trunk.	For Tires	Use Trunk.
28 x 3	21 in. in diameter	30 x 3	23 in. in diameter
30 x 3½		32 x 3½	
30 x 4		32 x 4	
32 x 4½		34 x 4½	
		34 x 5	
		36 x 5½	
32 x 3	24 in. in diameter.	34 x 3	25 in. in diameter.
34 x 4		34 x 3½	
36 x 5		36 x 4	
		36 x 4½	

VENEER BASSWOOD WILCO TRUNK.



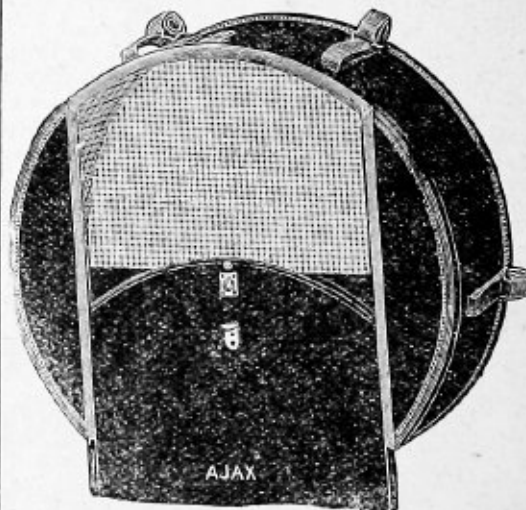
2140

Nothing Better Made. Cheapest in the End.

The front and back of this trunk are made of three-ply basswood veneer. The sides are made of fibre, it is covered with heavy black enameled duck, bound with English leather. For any size tire from 28x3 to 36x5, 9 inches deep.

No. 2140. Regular Price, \$10.00. Cash Price, \$5.95.

AJAX SLIDING DOOR TIRE TRUNK.



2141

Our latest Tire Trunk. Remove the catch and drop the sliding door. Can be operated in two seconds. Guaranteed to be dust and waterproof. Made also for demountable rims.

Made of veneer basswood. Iron frame. Covered with heavy black enameled waterproof duck. The door slides between two brass channels. It is fitted with clasp and brass lock.

Sizes: 20 to 26 in. in diameter and 9 inches deep.

No. 2141. Regular Price, \$12.00. Cash Price, \$8.50.

No. 2142. Same Trunk for Demountable Rims. Regular Price, \$15.00. Cash Price, \$10.00.



2154

REVOLVING DOOR TIRE TRUNK.

This Tire Trunk is an improvement on all trunks of similar make which are at present on the market, it has a patent revolving door which makes it absolutely dust and waterproof. Handstitched all around. Is fitted with brass lock catch. Lined with English plaid.

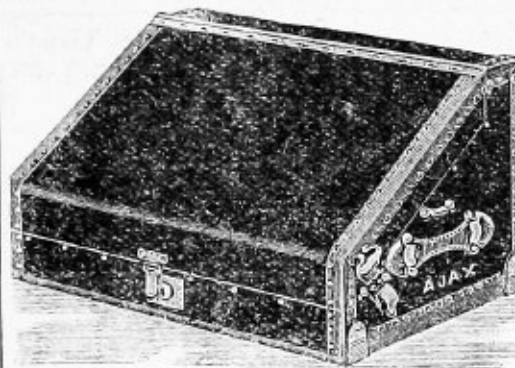
When ordering state size of tire.

Sizes: 22 inches, 23 inches, 24 inches, 25 inches in diameter, 9 inches deep.

No. 2154. Regular Price, \$12.00. Cash Price, \$7.75.

Colors such as grey, red, maroon, etc., extra, \$1.00.

Made V-shaped at bottom to fit demountable rim tire, extra, \$1.00.

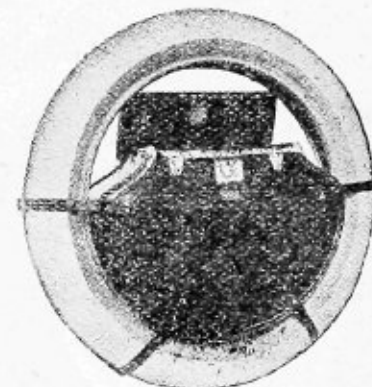


2155

AJAX ROADSTER AUTO TRUNK.

Auto Trunk. A strong well made article. Made of wood, iron and enameled duck, bound in leather. In shape it is specially adapted for Roadster Cars.

No.	Size.	Regular Price.	Cash Price.
2155	28x17x15.....	\$16.00	\$10.50
2156	30x17x15.....	18.00	11.50
2157	32x17x15.....	20.00	12.50

KING'S TIRE TRUNK.
 For Those Who Want Only the Finest.


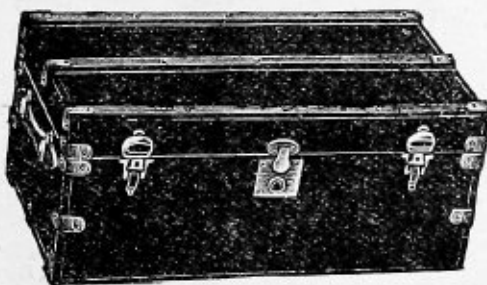
2143

The most convenient, roomy and swellest tire trunk made. We guarantee this absolutely water and dust proof. Will fit one or two tires. When ordering state size of your tires. Can be packed or unpacked while in place in tire. Can be taken out in a jiffy and carried like a sult case. This has a steel bound frame covered with heavy waterproof black duck, all edges bound in heavy leather.

No. 2143. Net Cash Price, all sizes, \$12.50.

PERFECTION REAR AUTO TRUNK.

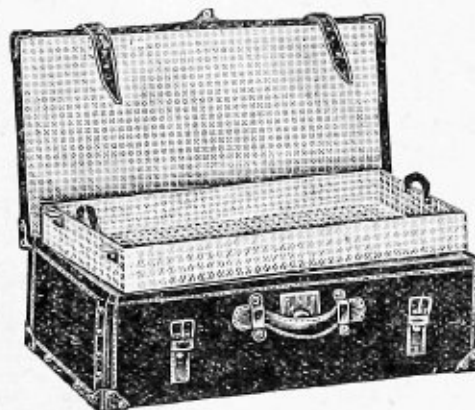
The body of this trunk is made of wood covered with black enameled cloth, is bound with steel angles, held in place with steel clamps, has three narrow slats on top and two wide slats at the bottom. It is fitted



2144

with brass lock and catches, and is neatly lined and fitted with 3-inch tray.

No.	Leng.	Width.	Depth.	Regular Price.	Cash Price.
2144	28 in.	15 in.	12½ in.	\$12.00	\$7.50
2145	30 in.	15½ in.	13 in.	13.00	8.50
2146	32 in.	16 in.	13½ in.	15.00	9.50

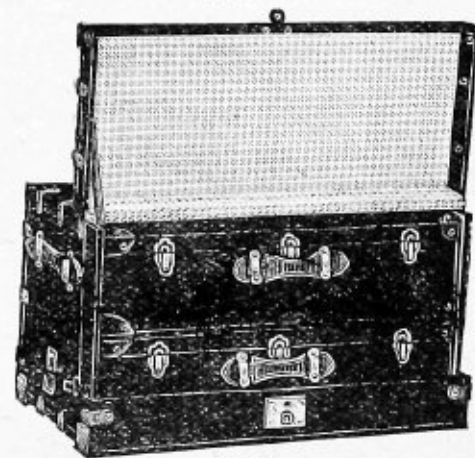
FEATHERWEIGHT AUTO SUIT CASE.
 For Light Cars and Short Trips.


2147.

Substantially made and well furnished throughout. Covered with black enameled duck and bound in leather. Has leather corners, brass lock and leather straps, with good grip handle. Neatly lined. Also 2½ inch tray inside.

No.	Leng.	Width.	Depth.	Regular Price.	Cash Price.
2147	26 in.	13½ in.	8 in.	\$7.50	\$4.90
2148	28 in.	14 in.	8½ in.	8.00	5.25
2149	30 in.	14½ in.	9 in.	8.50	5.75
2150	32 in.	15 in.	9½ in.	9.00	6.25

Special sizes to order.

TOURIST DOUBLE SUIT CASE AUTO TRUNK.

2151

The body of this trunk is made of bass-wood and covered with black enameled cloth; is bound with steel angles, held in place by steel clamps; is fitted with brass lock and catches, and contains two neatly made black enameled suit cases.

No.	Leng.	Width.	Depth.	Regular Price.	Cash Price.
2151	28 in.	15 in.	15½ in.	\$17.50	\$12.75
2152	30 in.	15½ in.	16 in.	20.00	13.25
2153	32 in.	16 in.	16½ in.	22.50	14.75

"IF YOU ARE SATISFIED WITH THE GOODS YOU BUY FROM US, TELL OTHERS; IF NOT, TELL US."

PREMIER TIRE AND DEMOUNTABLE RIM COVERS

PREMIER LOCK FLAP BUTTONED TIRE COVER.

(Patent Pending.)



707

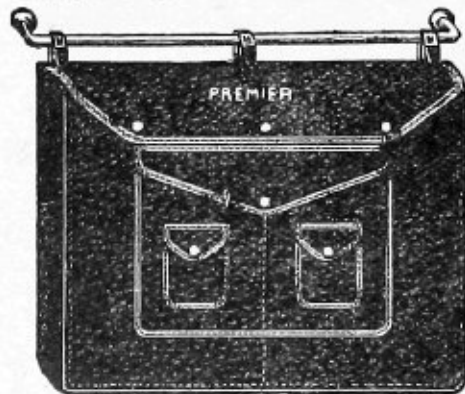
Easy to put on and take off. The lock flap makes it water and dust proof. The only perfect fitting tire cover that is water and dust proof when placed in any position.

Directions: Simply adjust snugly about tire. Lock the flap and snap the buttons.

Made of best quality enameled duck or fabric leather.

No.		Reg. Price.	Cash Price.
703	Black enameled heavy duck, all sizes	\$3.00	\$1.69
704	Black enameled medium weight duck, all sizes	2.50	1.39
705	Any color heavy duck, all sizes	3.50	1.95
706	Fabric leather, any color, all sizes	4.50	2.25
707	Black enameled heavy duck, for demountable rims, all sizes	3.50	1.95
708	Any color enameled heavy duck, for demountable rims, all sizes	4.00	2.25
709	Any color fabric leather, for demountable rims, all sizes	5.00	2.75

PREMIER COAT RAIL LUGGAGE BAG



3100

Does not interfere with use of rail. They are well made and handsomely finished. The bag is divided into two compartments which are large enough to hold rubber coats, dusters, etc. On the outside there are two large and two small pockets; plenty of room for road maps, goggles, gloves, etc. Size, 34x18 inches.

NEW SIDE BUTTON LOCK FLAP TIRE COVER



3087

This cover is an improvement over the Lock Flap Cover in so far as it buttons on the side of the tire instead of on the inside under the tread. The adjustment features are such that this cover is positively rain and dust proof. A very handsome and durable cover.

No.		Reg. Price.	Cash Price.
3087	Black en. heavy duck, all sizes	\$3.00	\$1.75
3088	Black en. medium duck, all sizes	2.50	1.45
3089	Any color en. heavy duck, all sizes	3.50	2.05
3090	Fabric leather, any color, all sizes	4.50	2.35
3091	Black en. duck for demountable rims, all sizes	3.50	2.05
3092	Any color en. duck for demountable rims, all sizes	4.50	2.35
3093	Any color fabric leather for demountable rims, all sizes	5.50	3.00

SLEEVE PROTECTORS.



1531

Made of genuine rubber cloth, strictly water and dust proof. Drawn over your arm enables you to do all the work you want without getting your sleeves and cuffs filled with oil, etc. Just the proper thing for the man who drives his own car.

No. 1531. Regular Price, per pair, 75c. Cash Price, per pair, 39c.

No.		Cash Price.
No. 3100	Patent leather finished duck	\$2.19
No. 3101	Pantasote, black or colors	4.19
No. 3102	Mohair pinchbeck	5.25
No. 3103	Fabric Leather	2.69

Note.—Any of above furnished in following sizes: 28, 30 and 32 inches wide; either size same price.

PREMIER SPRING-ON TIRE COVER



3094

This is one of the finest covers ever produced. Made of the best quality of either enameled duck or drill. It is made with a flat spring which sets on the inside of the tread. The buttons by which it is fastened are run through the spring, making the tire cover practically indestructible. Guaranteed rain and dust proof.

No.		Reg. Price.	Cash Price.
3094	Black enameled duck, all sizes	\$2.50	\$1.19
3095	Any color enameled duck, all sizes	3.00	1.75
3096	Fabric leather, any color, all sizes	4.50	2.25
3097	Black enameled duck for demountable rims, all sizes	3.00	1.49
3098	Any color enameled duck for demountable rims, all sizes	4.00	1.69

DUST COVERS

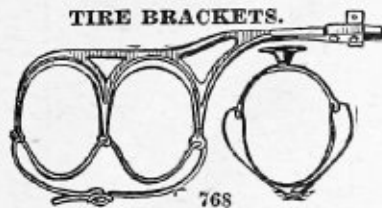


3104

Protects your car from dust and dampness when not in use.

No.		Cash Price.
3104	Enameled muslin, size 100x144	\$3.00
3105	Enameled muslin, size 100x180	3.40
3106	Enameled muslin, size 100x216	4.25
3107	Enameled muslin, size 150x216	6.25
3108	Enameled muslin, size 216x250	10.25
3109	Enameled drill, size 100x144	4.50
3110	Enameled drill, size 100x180	5.00
3111	Enameled drill, size 100x216	6.25
3112	Enameled drill, size 150x216	9.45
3113	Enameled drill, size 216x250	13.90
3114	Rubber cloth, size 100x144	6.00
3115	Rubber cloth, size 100x180	7.50
3116	Rubber cloth, size 100x216	9.00
3117	Rubber cloth, size 150x216	13.50
3118	Rubber cloth, size 216x250	21.00

REMEMBER WE PREPAY TRANSPORTATION CHARGES—SEE INSIDE FRONT COVER.

**MANGANESE BRONZE PERFECTION
TIRE BRACKETS.**

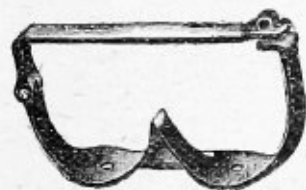
768

The strongest and finest appearing tire carrier produced. Cleanly finished and highly polished.

Each set consists of three pieces with straps for one or two tires.

No. 768. Single. Price, \$4.00. Cash Price, \$1.85.

No. 769. Double. Price, \$5.50. Cash Price, \$2.25.

RUNNING BOARD LOCK HOLDER

No. 3119. This is made of malleable iron to hold and lock two tires of all sizes, and is also furnished for demountable rims. Finished in hard black rubbered enamel.

Reg. Price, \$1.50. Cash Price, 75c.

No. 3120. Same Holder with Top Bar; brass or nickel plated. Regular Price, \$2.00. Cash Price, \$1.00.

**1912 FORE-DOOR AND "TORPEDO" CAR
SPARE WHEEL AND TIRE CARRIER**

Fastened to running board only. Do not mar your car body.



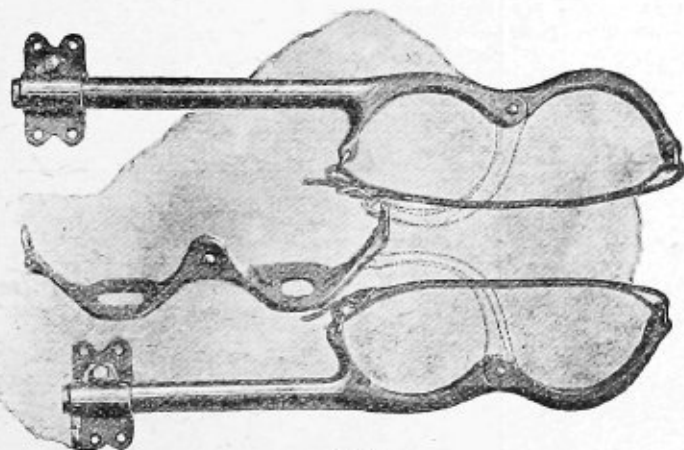
2058

Diagrammatic sketch, showing the action of the "G. P. M." spare wheel carrier.

This tire holder is made in England and is the best and finest thing of its kind yet produced. It is simple both in construction and operation. It consists of a strong upright tubular support with an iron base having a pair of jaws which receive the bottom of the wheel. Fitting inside the support is a rod, at the lower extremity of which is a strong spring, connected to the base. Hinged at the top of the rod are two hooked arms, and when the carrier is not in use they hang down alongside the support.

No. 2058. Base and upright ebony black baked enamel. Folding arms, brass finished. Cash Price, \$7.50.

No. 2060. Base ebony black baked enamel. Upright and arms polished brass finish. Cash Price, \$9.00.

"MILWAUKEE" DEMOUNTABLE RIM AND SPARE WHEEL HOLDERS

3121

Triple Strength—The Strongest Holder Made.
Just What You Have Been Looking For

under side of the front seat with four screws and to the side of the body with two screws.

No. 3121. For Demountable Rims as above, in heavy polished brass finish. Regular Price, \$8. Cash Price, \$5.95.

No. 3122. For Demountable Rims as above, made of malleable iron, 3 coats hard black rubber-finished enamel. Regular Price, \$5.50. Cash Price, \$3.95.

No. 3123. Same Set for 3½ to 6 Inch Tires, made of heavy polished brass; floor plate furnished with chain or strap at same price. Regular Price, \$7.00. Cash Price, \$3.95.

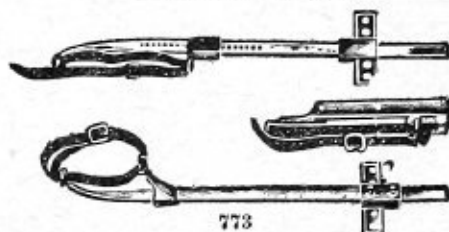
No. 3124. Same Set for 3½ to 6 Inch Tires, made of malleable iron; hard black rubber-finished enamel. Regular Price, \$4.50. Cash Price, \$2.75.

No. 3125. Same Set for 3 to 4 Inch Tires, medium weight polished brass; complete with 3 straps. Regular price, \$5.00. Cash Price, \$2.75.

These Demountable Rim Tire Holders are very strong and neat in appearance. The long arms are made of heavy one-inch brass tubing, with very strong hinge terminals, which will hold one or two Demountable Rims and Tires up to and including six inches in diameter.

The floor plate is concave to fit the tire and is equipped with a chain (but no pad-lock) instead of a strap. The other holders have straps made of extra heavy leather, ¾x35 in. long.

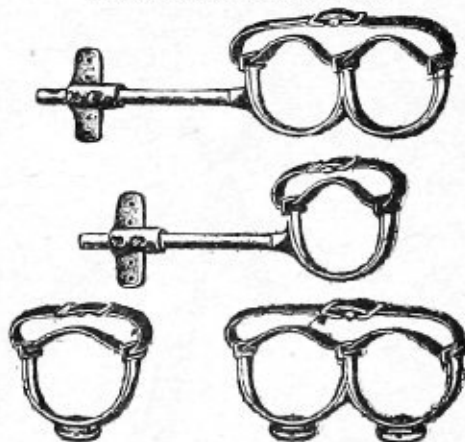
The very strong clamping body brackets hold the arms securely at any desired position. (No set screws are used.) The one is fastened to the dash with four large screws or bolts, the other to the

**MANGANESE BRONZE ADJUSTABLE
TIRE HOLDERS.**

773

Made heavy, highly polished. Self-adjusting by means of sliding screw, and will carry one, two or three tires of any size. Three pieces complete with straps.

No. 773. Regular Price, \$6.00. Cash Price, \$2.19.

STAR TIRE BRACKETS.

774

These brackets are made of solid cast brass, strong, neat and substantial. Highly polished and fitted with straps.

No. 774. Single. Set of 3, List Price, \$3.00. Cash Price, \$1.69.

No. 775. Double. Set of 3, List Price, \$4.00. Cash Price, \$2.19.

No. 3126. Single Set of 3, made of malleable iron, hard black rubber finish. Regular Price, \$2.50. Cash Price, \$1.00.

No. 3127. Double Set of 3 as above. Regular Price, \$3.50. Cash Price, \$1.25.

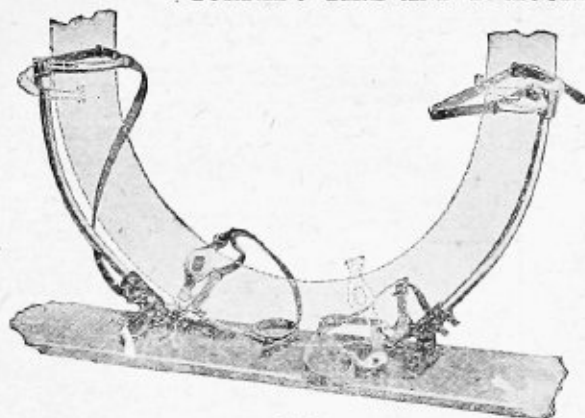
SECURITY TIRE BRACKETS.

770

These brackets are made of brass with heavy leather straps to fasten around tire. They come in sets of three and fasten to side of car in any position. They prevent tire from chafing and protect the car.

The base being separate from the yoke, it is possible when not in use to unscrew yoke and leave only the base attached to car. These brackets can be attached to any car and in any position by use of the extra extensions.

No. 770. Tire bracket in sets of 3. Set, List Price, \$2.00. Cash Price, 90c.

TORPEDO TIRE AND DEMOUNTABLE RIM HOLDER

3128

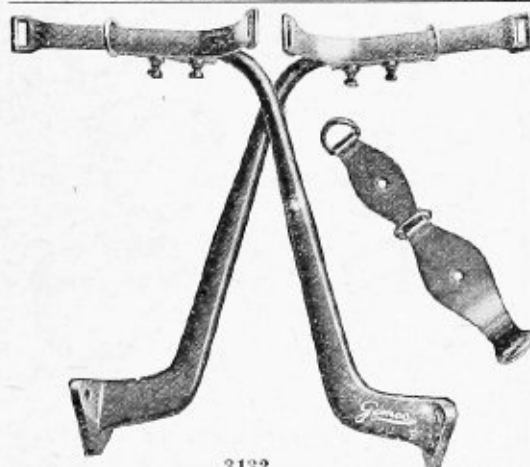
Upper terminals are furnished either in black, nickel or brass as desired.

No. 3128. Nickel. Regular Price, \$8.00. Cash Price, \$6.00.

No. 3129. Brass. Regular Price, \$7.50. Cash Price, \$5.65.

No. 3130. With four straps. Regular Price, \$5.80. Cash Price, \$4.39.

This holder was designed especially for use on torpedo body and fore door cars. It is contained entirely on the running board, which obviates the necessity of drilling any holes or in any way marring the body of the car. Set consists of two substantial floor plates made of malleable iron, from which extend two curved, solid arms (steel) surmounted by two strong, folding terminals, which hold the tires or demountable rims firmly in place. The floor plates are bolted to the running board and permit of sufficient adjustment to accommodate any size tire or demountable rim. The set is equipped with four folding hinge clips and will accommodate either one or two tires or demountable rims. The bottom floor plates and curved arms are, in all cases, finished in hard rubber black enamel.



3132

GEMCO FRAME TIRE HOLDERS

This tire holder is designed especially for fore door and torpedo body cars and, as the name implies, is attached to the frame of the car by means of bolts. The upper terminals, which carry the tires, are adjustable. These terminals and the floor plate being straight, make it very easy and convenient to withdraw a heavy tire or demountable rim. Made in 2 sizes, in all cases the frame arms are finished, in black enamel. The adjustable terminals, however, will be furnished in either nickel, brass or black.

No. 3132. All black, with three straps for tires and rims up to 36x4½. Regular Price, \$4.00. Cash Price, \$3.25.

No. 3133. All black, with 3 straps for largest tires and rims. Regular Price, \$5.00. Cash Price, \$4.00.

For nickel terminals, add \$1.50.

For brass terminals, add \$1.00.

THE B-A TIRE LOCK

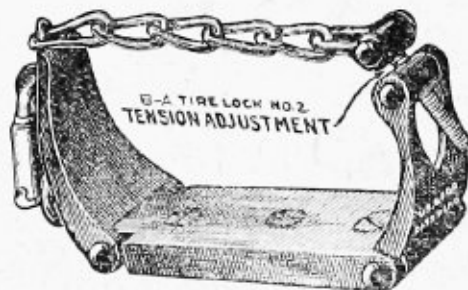
will positively prevent chafing the tires with any style of tire holders. An adjustment is provided for the purpose of obtaining a tight tension for any link of the chain to the base of the lock over any size tires, which will prevent the tires from being thrown up and down, and rubbed against the tire holders, particularly going over rough roads, thus preventing chafing.



3134

THE B-A TIRE LOCK NO. 1

is beautifully finished in a hard rubber baked japan, and will accommodate one or two of any size tires from the smallest to the largest, with or without demountable rims.



3135

THE B-A TIRE LOCK NO. 2

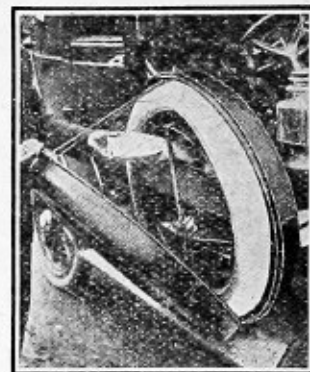
is the same style as No. 1, except that the base is longer, and straight instead of curved, and will accommodate three tires of any size, from the smallest to the largest, with or without demountable rims.

Lock No. 1 or No. 2 complete (including high grade Yale padlock; nuts, bolts, plain washers and lock washers, ready for attaching to the car).

No. 3134 or 3135. Malleable iron. Regular Price, Each, \$5.00. Cash Price, \$3.75.

No. 3134 or 3135. Manganese Bronze. Regular Price, Each, \$7.00. Cash Price, \$5.25.

No. 3134 or 3135. Nickel plated. Regular Price, Each, \$8.00. Cash Price, \$6.00.



3131

STAR TIRE AND TOOL CASE

Made of Pressed Steel—Patented

The "Star" Case is the only one of the type that is (or can be) made and sold. It is handsome, light, strong, durable, clean, noiseless, fool, thief and weather proof, accessible (one minute to open, close and lock), and altogether unequalled and indispensable to any car owner carrying valuable tires, spare parts and tools.

Finished like hood or fender of car. Replaces 3 tire irons—2 covers—1 inside box. Outwears 4 sets—Is neater and more attractive.

Each case holds (all under one lock and instantly accessible) the following: 2 shoes, Q. D., clincher or demountable; 2 tubes in shoes (partially or fully inflated); 4 to 6 additional tubes in upper central space (tubes to be wrapped in paper or cloth to avoid abrasion). Small tools and spare parts in lower central space.

Finish—Black japan or prime coat (which can be painted by buyer to precise color of any particular car).

Regular Price, \$25.00. Cash Price, \$22.50, complete including two adjustable fasteners and brass padlock.

Always specify size and finish wanted.

"THE LOCKING-CHAIN"

PREVENTS THE STEALING
OF SPARE TIRES



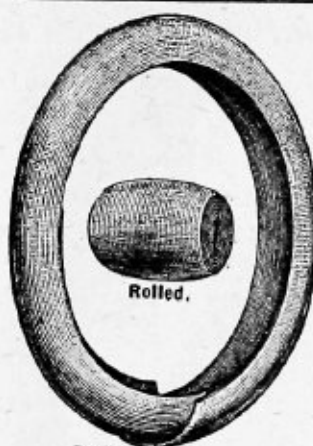
776

THIEF PROOF CHAIN LOCK

Made of heavy steel coil chain 36 inches long and covered with leather to prevent rattling and fitted with strong lock. Saves your tires from being stolen.

Regular Price, \$1.50. Cash Price, 75c.

No. 776A. Heavier chain for larger tires and demountable rims. Chain covered with heavy leather 42 inches long, heavy strong lock. Regular Price, \$2.00. Cash Price, \$1.00.



Ready for Use.
2466

The Dykes Ready for Use—Inner Shoe or Reliner

Saves 90 per cent. of your tire troubles and gives you double mileage.

The Dykes Ever Stick Reliner is a complete inside strengthening fabric, made of 3-ply and 4-ply puncture proof fabric. It prevents blow-outs and practically doubles the life of tires. Fits between the inner tube and casing.

They are moulded to the shape of the inside of shoe.

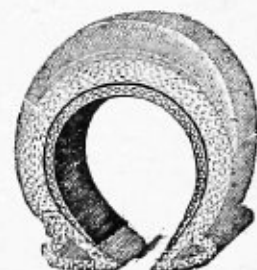
Directions for Use.—You remove all dirt and soapstone from the inside of the shoe, using gasoline for the purpose. The Reliner is already prepared with a rubbered coating that will adhere to the inside of the shoe, if slightly dampened with gasoline, making a permanent reinforcement and adding from 60 per cent. to 70 per cent. more strength to your tires and practically puncture proof.

Each Dykes Reliner Fully Guaranteed.

Warning.—Since our Dykes Reliners have become so popular we have many imitators who are using regular hose pipe duck instead of high test Tire Fabric and offer them at lower prices.

Sizes and prices as follows:

No.	Size.	Regular Price.	Cash Price.
2466	28x3 —3-ply	\$3.75	\$1.92
2467	30x3 —3-ply	4.00	2.12
2468	32x3 —3-ply	4.25	2.22
2469	29x3½ —3-ply	4.25	2.45
2470	30x3½ —3-ply	4.50	2.55
2471	32x3½ —3-ply	4.75	2.75
2472	34x3½ —3-ply	5.00	2.85
2473	36x3½ —3-ply	5.25	3.00
2474	30x4 —4-ply	5.25	3.15
2475	31x4 —4-ply	5.50	3.25
2476	32x4 —4-ply	5.75	3.35
2477	33x4 —4-ply	6.00	3.45
2478	34x4 —4-ply	6.25	3.60
2479	35x4 —4-ply	6.50	3.75
2480	36x4 —4-ply	6.75	3.85
2481	32x4½ —4-ply	7.00	3.75
2482	34x4½ —4-ply	7.25	3.95
2483	35x4½ —4-ply	7.50	4.10
2484	36x4½ —4-ply	7.75	4.25
2485	34x5 —4-ply	8.00	4.60
2486	35x5 —4-ply	8.25	4.75
2487	36x5 —4-ply	8.50	4.90
2488	37x5 —4-ply	8.75	5.00



2466
Showing Reliner inside the tire.

WOODWORTH TREADS

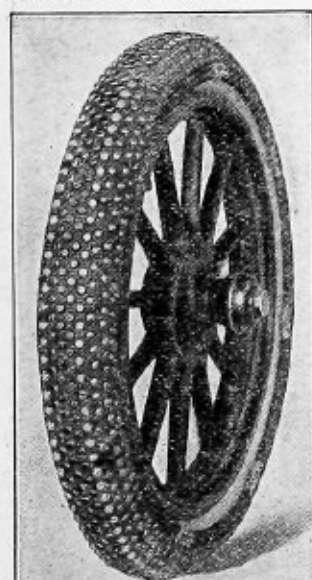
are automobile tire protectors made of leather, studded with steel rivets, held on the tires by rings on each side, composed of coil springs.

The treads are made in two styles: the full studded tread for use on very rough, rutty or rocky roads and the center-studded tread for use on comparatively smooth roads. The full-studded tread has rivets not only on the middle portion which takes the wear on the road, but also flathead rivets on the sides which protect it from wear in deep ruts, or where there are many rocks to catch and tear the sides of the tire. The center-studded tread is made of a little lighter leather than the full-studded and has rivets only on the middle or wearing portion.

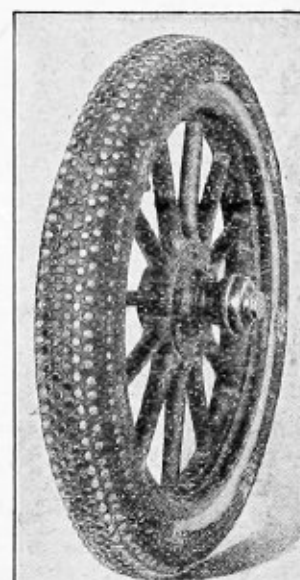
Prices of Woodworth Full-Studded No. 3136 and Center Studded Treads, No. 3137—American Sizes

Size.	Full Studded		Center Studded		Size.	Full Studded		Center Studded	
	Reg. Price.	Cash Price.	Reg. Price.	Cash Price.		Reg. Price.	Cash Price.	Reg. Price.	Cash Price.
26x3	\$11.70	\$11.11	\$8.00	\$7.60	36x4	\$25.80	\$24.51	\$17.75	\$16.86
28x3	12.90	12.25	8.50	8.07	37x4	26.70	25.36	18.25	17.34
30x3	14.10	13.38	9.00	8.55	40x4	29.40	27.93	20.00	19.00
32x3	15.30	14.53	9.60	9.12	32x4½	25.20	23.91	19.00	18.05
34x3	16.50	15.67	10.20	9.69	34x4½	27.30	25.93	20.50	19.47
36x3	17.70	16.81	10.75	10.21	35x4½	28.50	27.07	21.25	20.19
28x3½	14.40	13.68	.....	.....	36x4½	29.40	27.93	22.00	20.90
28x3½	15.90	15.10	10.00	9.50	37x4½	30.50	28.97	23.00	21.85
29x3½	16.65	15.82	.....	.....	38x4½	31.50	29.92	.....	.....
30x3½	17.40	16.53	10.75	10.21	42x4½	35.70	33.92	26.50	25.17
31x3½	18.30	17.38	11.15	10.59	34x5	30.30	28.78	23.25	22.09
32x3½	18.90	17.95	11.50	10.92	35x5	31.50	29.92	24.25	23.01
33x3½	19.65	18.67	.....	.....	36x5	32.70	31.06	25.00	23.75
34x3½	20.40	19.38	12.25	11.63	37x5	33.90	32.20	26.00	24.70
35x3½	21.90	20.80	13.20	12.54	38x5	35.10	33.34	26.75	25.41
30x4	20.40	19.38	14.50	13.77	40x5	37.50	35.62	28.50	27.07
31x4	21.30	20.23	15.00	14.25	36x5½	35.70	33.91	27.00	25.65
32x4	22.20	21.09	15.50	14.92	37x5½	37.05	35.20	28.00	26.60
33x4	23.10	21.94	16.00	15.20	38x5½	38.40	36.48	29.00	27.55
34x4	24.00	22.80	16.50	15.67	40x5½	41.10	39.04	.....	.....
35x4	24.90	23.65	17.25	16.39					

Woodworth treads can be made to fit any size of pneumatic tires. The price of any size not shown here will be half way between the prices of the sizes next larger and smaller in the same tire diameter.



3136—Full Studded Tread

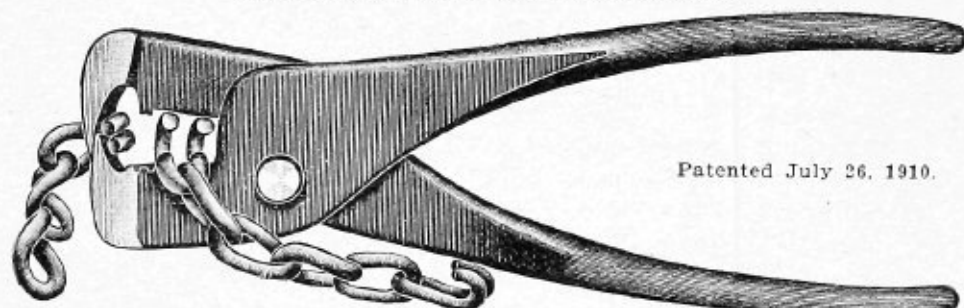


3137—Center-Studded Tread

All treads for tires smaller than 3 inch are made with one continuous spring on each side. They are applied by prying over the deflated tire, or by placing the tire in the tread before putting it on the rim.

REMEMBER—WE NOT ONLY QUOTE LOW PRICES BUT WE FILL OUR ORDERS TOO AT THESE PRICES

NECESSITY TIRE CHAIN REPAIR TOOL.

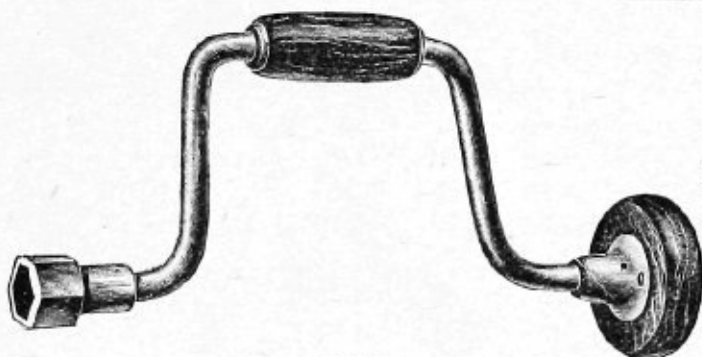


Patented July 26, 1910.

2174

With this tool a repair can be made in a few seconds; a broken cross chain removed and inserted in less than one minute while the chain is on the wheel and without deflating the tire or soiling the hands. Made from the best steel drop forgings, milled accurately, fitted and tempered to withstand the roughest use.

No. 2174. Reg. price \$2.00; cash price \$1.25.



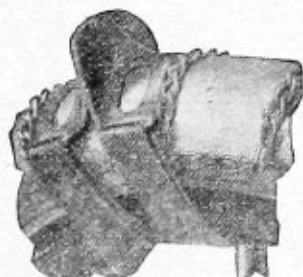
BRACE USED FOR REMOVING QUICK DETACHABLE RIMS.

Made of the best material, rosewood finished handle and head, standard size. This Brace is adapted and will fit Hexagon Nuts which are used on Quick Demountable Rims.

No. 3235. Regular Price 75c. Cash Price 49c.

3235

EMERGENCY MUD HOOK FOR PNEUMATIC TIRES.



3138

One on each wheel we guarantee will get you out of the mud, sand or snow when everything else fails. They can be put on when the wheel is in deep mud, but chains cannot; and they are sure to get you out, while chains dig in deeper. When you are out, take them on. You can dispense with chains if you carry a set or two of these. The farmer will charge the price of two sets to pull you out of one hole. For long stretches of mud or deep sand, two or three sets can be used to advantage. They are malleable iron; cannot break; weight 5 lbs. per set. Furnished in three sizes, No. 1 for 3x3 1/2 inch tire; No. 2 for 4x4 1/2 inch tire; No. 3 for 5x5 1/2 inch tire.

No. 3138. Size No. 1 per set of two with 4 straps. Regular Price \$2.50. Cash Price \$1.95.

No. 3139. Size No. 2 per set of two with 4 straps. Regular Price \$2.50. Cash Price \$1.95.



"GEM" STEEL OIL CANS.

The finest grade of oilers of this type. Made of cold-rolled steel, and more durable than any other oiler of this kind on the market.

No.	1205 Capacity.	Nozzle.	Regular Price.	Cash Price.
1205	1/3 pint	4 in.	\$0.50	\$0.29
1206	1/2 pint	4 in.	.75	.39
1207	3/4 pint	6 in.	1.00	.53
1208	1 pint	9 in.	1.25	.60

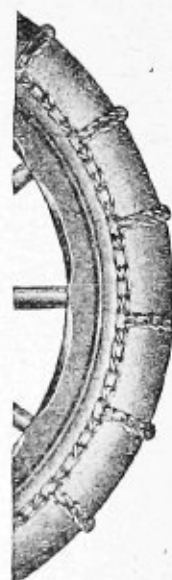
No. 3140. Size No. 3 per set of two with 4 straps. Regular Price \$2.50. Cash Price \$1.95.

No. 3141. Size No. 1 per set of two without straps. Regular Price \$1.50. Cash Price \$1.25.

No. 3142. Size No. 2 per set of two without straps. Regular Price \$1.50. Cash Price \$1.25.

No. 3143. Size No. 3 per set of two without straps. Regular Price \$1.50. Cash Price \$1.25.

RID-O-SKID TIRE CHAINS.

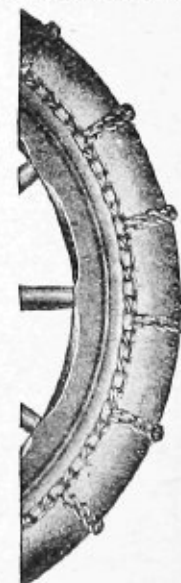


3144

No.	Size.	Cash Price Per Pair.
3144	28x2 1/2	\$1.95
3145	30x2 1/2	2.10
3146	28x3	2.40
3147	30x3	2.50
3148	32x3	2.60
3149	34x3	2.75
3150	36x3	2.90
3151	28x3 1/2	2.50
3152	30x3 1/2	2.65
3153	32x3 1/2	2.80
3154	34x3 1/2	2.95
3155	36x3 1/2	3.10
3156	30x4	2.80
3157	31x4	2.90
3158	32x4	3.00
3159	33x4	3.10
3160	34x4	3.20
3161	35x4	3.30
3162	36x4	3.40
3163	37x4	3.50
3164	40x4	4.00
3165	30x4 1/2	3.00
3166	32x4 1/2	3.25
3167	34x4 1/2	3.40
3168	35x4 1/2	3.50
3169	36x4 1/2	3.60
3170	37x4 1/2	3.75
3171	38x4 1/2	3.90
3172	40x4 1/2	4.25
3173	42x4 1/2	4.50
3174	34x5	4.10
3175	36x5	4.50
3176	37x5	4.70

No.	Size	List	No.	Size	List
3177	38x5	4.90	3181	37x5 1/2	5.40
3178	39x5	5.10	3182	38x5 1/2	5.60
3179	40x5	5.25	3183	38x6	6.50
3180	36x5 1/2	5.20	3184	40x6	6.75

WEED NON-SKID CHAINS AND CROSS CHAINS.



3185

No.	Size.	Cash Price Per Pair.
3185	28x2 1/2	\$3.50
3186	30x2 1/2	3.75
3187	28x3	4.00
3188	30x3	4.50
3189	32x3	5.00
3190	34x3	5.50
3191	36x3	6.00
3192	28x3 1/2	4.50
3193	30x3 1/2	5.00
3194	32x3 1/2	5.50
3195	34x3 1/2	6.00
3196	36x3 1/2	6.50
3197	30x4	5.50
3198	31x4	6.00
3199	32x4	6.00
3200	33x4	6.50
3201	34x4	7.00
3202	35x4	7.50
3203	36x4	7.50
3204	37x4	8.00
3205	40x4	10.00
3206	30x4 1/2	6.50
3207	32x4 1/2	7.00
3208	34x4 1/2	7.50
3209	35x4 1/2	8.00
3210	36x4 1/2	8.00
3211	37x4 1/2	8.75
3212	38x4 1/2	9.50
3213	40x4 1/2	11.00
3214	42x4 1/2	12.50
3215	34x5	8.50
3216	35x5	9.00
3217	36x5	9.00
3218	37x5	9.75
3219	38x5	10.50
3220	39x5	11.25
3221	40x5	12.00
3222	36x5 1/2	12.00
3223	37x5 1/2	13.00
3224	38x5 1/2	14.00
3225	38x6	14.00
3226	40x6	15.00

No.	Size.	Cash Price Per Pair.
3227	2 1/2	\$0.05
3228	3	.06
3229	3 1/2	.08
3230	4	.09
3231	4 1/2	.10
3232	5	.12
3233	5 1/2	.15
3234	6	.18

No.	Size.	Cash Price Per Pair.
3236	28-30	\$1.00
3237	32-34	1.00
3238	36	1.00

REMEMBER WE PREPAY TRANSPORTATION CHARGES—SEE INSIDE FRONT COVER.

EVER-READY TIRE TOOL.

745

A new patented device making the removal of clincher tires as easy as quick detachables. The roller is placed under the bead and handle turned to the right for applying, turned to left for removing. It is a corker. Cast steel, nickel-plated.

No. 745. Regular Price, \$5.00. Cash Price, \$4.00.

B. AND J. TIRE TOOL.

Especially adapted for loosening rusty casings from corroded rims. Made of drop forgings. Can also be used for removing or replacing casings. Heavily japanned to prevent rust.

No. 746. Regular Price, \$1.50. Cash Price, 35c.



746

SPRINGFIELD TIRE DETACHABLE TIRE TOOL.

Showing tire pushed inward, thus giving access to stay bolts and valve stem.

An adjustable tire tool made to conform with all shapes and sizes of different makes of casings.

No. 752. List Price, \$1.25. Cash Price, 50c.



752

STYLE "B" OIL CUPS.

Simply raise the cap, pour oil in. The cap closes automatically and cannot jar open. Made of brass, nickel-plated.

No. 753. Pipe thread size, 1/4 in. Regular Price, 18c. Cash Price 12c.

No. 754. Pipe thread size, 1/2 in. Regular Price, 20c. Cash Price, 14c.



753

CONTINENTAL TIRE TOOLS.

Very valuable for lifting casings from the rim. A good, strong tool, having sufficient leverage to handle the largest casing.

Malleable iron, 11 in. long.

No. 750. Regular Price, 50c. Cash Price, 18c.



750

MICHELIN TIRE TOOL.

747

Will lift any casing 2 1/4 to 5 in. in diameter. An excellent lug iron. The fork is placed under the casing and lever forced upward to allow you to place lugs and valve into rim. Made of wrought iron.

No. 747. Regular Price, \$1.25. Cash Price, 20c.

KRAKERJACK TIRE TOOLS.

748

The old reliable, practical, indispensable tool for lifting casing over the rim after it is released from its position. Made of malleable iron. Two sizes.

No.	Length.	Regular Price.	Cash Price.
748	13 in.	\$0.25	\$0.10
749	17 in.	.50	.15

"EMPRESS" GREASE CUPS.

The cap cannot jar off, it being held by spring ratchet, which locks at every turn. Polished brass. This style is used on over 80 per cent. of the cars in this country.



757

No.	Mfrs. No.	Inside Diam.	Shank Thread.	Regular Price.	Cash Price.
757	00	1 in.	1/2 in.	\$0.50	\$0.25
758	0	1 1/4 in.	1/2 in.	.60	.35
759	1	1 1/2 in.	1/2 in.	.70	.40
760	2	2 in.	1/2 in.	.90	.50

BRASS UNION WITH CHECK VALVE.

755

No.	Pipe Thread.	Reamed Hole.	Regular Price.	Cash Price.
755	1/4 in.	3/16	\$0.40	\$0.30
756	1/2 in.	3/8	.50	.40

THE "IMPROVED" VALVE TAP AND DIE.

786

inside of valve. Made of drop-forged tempered steel. Positively the handiest little tool manufactured.

No. 786A. 3 in 1 valve tap and die, made of one piece of steel. Regular Price, 30c. Cash Price, 10c.

"EMPRESS" GREASE CUPS—Plain Pattern.

761

The most satisfactory grease cups on the market.

Made entirely of brass, neat, compact design, evenly cut threads.

Improved lug caps makes them "sure grip." Long knurl.

These cups fit perfectly and will not jar off.

They are fitted with leather washers, making leakage impossible.

No.	Diam., In.	Nip-ple, In.	Capac-ity, Oz.	Style.	List Price.	Cash Price.
761	1/4	1/4	1/4	000	\$0.46	\$0.12
762	1	1/4	1/4	00	.56	.20
763	1 1/4	1/4	2/3	0	.74	.25
764	1 1/2	1/4	1	1	.96	.30
765	2	1/4	2	2	1.28	.45
766	2 1/2	1/4	3 1/4	3	1.76	.60
767	3	1/2	5	4	3.00	.85

PEERLESS TIRE AND RIM TOOL.

3600

A simple but very efficient tool for removing tires and slide rings.

No. 3600. Reg. Price, 20c. Cash Price, 10c.

QUICK ACTING CAPS FOR TIRE LUGS.

No. 2311. Cash Price, 12c.

YALE LOCKS.

780

Regular Price, \$2.50. Cash Price, \$1.10.

NEW LARGER SIZE BEST STEEL VALVE TOOLS.

Hand Forged in one piece. One-quarter inch larger than the cut, which is larger than any on the market. Manufacturer's name on every tool. Highly polished. Straw color finish. First quality. Nothing as good on the market. Every tool stamped "Brown Tool Co."

Large Size. Will fit any man's hand. No. 786. Reg. Price, 50c. Cash Price, 15c.

FIRE EXTINGUISHER.

1195

The Ideal Fire Tube is a thin tube with a removable cap at the top, containing about three pounds of a dry chemical powder. Can be advantageously used with good effect on fires that have not gained too much headway. It is used to best advantage where water or chemical fluid might be open to objection, such as automobiles and similar risks. Delicate electric and other instruments are less likely to be injured by the powder than by a powerful liquid stream, and if the fire is attacked in its incipency, these "Fire Tubes" will be found to be effective. The tube should be hung on a nail, and when jerked downward the cap is pulled out, and the contents can then be scattered on the flame. The chemical powder has fire-extinguishing properties. Size, 21x $\frac{3}{4}$ x1 $\frac{1}{2}$ in. diameter.

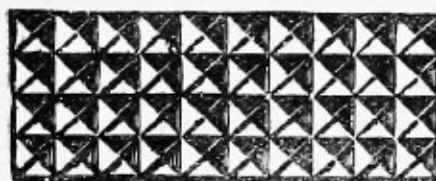
No. 1195. Regular Price, \$1.50. Cash Price, 49c.

**"GRE-SOLVENT" HAND SOAP.**

Miles ahead of soap; manufacturers claim it the best preparation for cleaning your hands from dirt, grease and stains of all kinds.

No. 1178. $\frac{1}{2}$ lb. tin. Cash Price, 7c.

1178



1181A

PYRAMID SHEET ALUMINUM.

For floor boards and running boards; always looks clean.

Cash Price

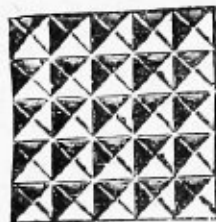
Per Running Foot.

No. 1181A Rolls 10 in. wide any length....30c
1181B Rolls 14 in. wide any length....40c
1181C Rolls 18 in. wide any length....50c

PYRAMID RUBBER MATTING

All mattings are 36 in. wide and are sold full width only.

Best quality, all white, for floor and running boards.

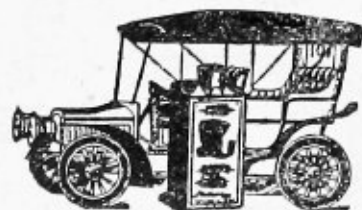


1180

No. 1180.
square foot.
Price, 50c.
Price, 30c.

LUCAS AUTO KLEAN

An Ideal Top Dressing and Body Polish



1194

It will renew the finish on your top upholstery, and make it look like new. Especially prepared to stand hard service and can be used on enamel

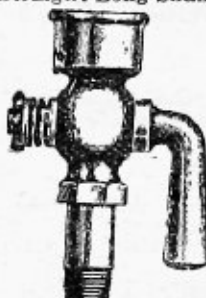
leather, rubber, pantasote and all artificial leathers. It preserves leather from decay and will not injure the finest leather made.

No.	Quantity.	Regular Price.	Cash Price.
1194	Pint can	\$0.75	\$0.44
1195	Quart can	1.50	.89
1192	$\frac{1}{2}$ gal. can	2.00	1.29

The Ideal Fire Tube is a thin tube with a removable cap at the top, containing about three pounds of a dry chemical powder. Can be advantageously used with good effect on fires that have not gained too much headway. It is used to best advantage where water or chemical fluid might be open to objection, such as automobiles and similar risks.

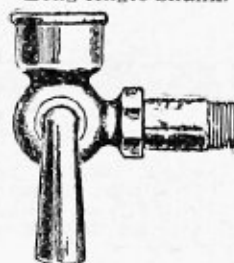
PRIMING CUPS.

Straight Long Shank.



1234

Long Angle Shank.



1240

Actual experience has shown us that a priming cup with spring key is the only practical and efficient style to use.

Impossible for any part to far loose and the key is always tight.

Made of steam metal, carefully machined and highly finished. High class cups.

Straight Long Shank.					Cash Price.
No.	Bell.	Size.	Price.		
1234	$\frac{5}{8}$ in.	$\frac{1}{4}$ in.	\$0.75		\$0.30
1235	$\frac{3}{4}$ in.	$\frac{1}{4}$ in.	.90		.37
1236	$\frac{7}{8}$ in.	$\frac{1}{4}$ in.	.95		.45
Straight Close Shank.					
1237	$\frac{3}{8}$ in.	$\frac{1}{4}$ in.	\$0.75		\$0.25
1238	$\frac{1}{2}$ in.	$\frac{1}{4}$ in.	.90		.36
1239	$\frac{3}{4}$ in.	$\frac{1}{4}$ in.	.95		.40
Long Angle Shank.					
1240	$\frac{5}{8}$ in.	$\frac{1}{4}$ in.	\$0.85		\$0.37
1241	$\frac{3}{4}$ in.	$\frac{1}{4}$ in.	1.10		.40
1242	$\frac{1}{2}$ in.	$\frac{3}{8}$ in.	1.15		.50
Close Angle Shank.					
1243	$\frac{5}{8}$ in.	$\frac{1}{4}$ in.	\$0.85		\$0.30
1244	$\frac{3}{4}$ in.	$\frac{1}{4}$ in.	1.10		.35
1245	$\frac{7}{8}$ in.	$\frac{1}{4}$ in.	1.15		.47

Note—Angle cups are made with key on right or left side. State which is desired.

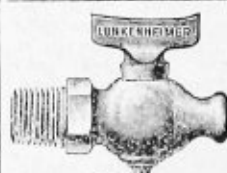
PRIMING CUP.

1258

These priming cups are made of brass with an "L" handle. Highly polished and buffed.

The spring always keeps the handle wherever it is put.

No. 1258. Price, 75c. Cash Price, 30c.



1267

SINGLE-THREAD**MALE PET COCK.**

No. 1267. Single-end

male, $\frac{1}{4}$ or $\frac{3}{4}$ in. pipe.

Cash Price, 25c.

CHAMOIS SKINS.

For cleaning auto bodies and brass parts. Highest grade on the market. Three sizes.

No. 1196. Size, 16x21 in. Regular Price, 75c. Cash Price, 35c.

No. 1197. Size, 20x26 in. Regular Price, \$1.00. Cash Price, 75c.



1196

EMERGENCY GASOLINE OR OIL TANK.

1262

It holds one gallon of any liquid, oil or gasoline. Very handy for carrying with you on the road at all times. A spare gallon of gasoline often saves a 10-mile walk. Heavy tin, boxed in cedar.

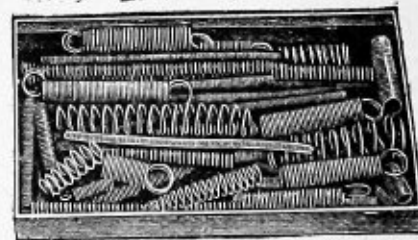
No. 1262. Regular Price, \$1.00. Cash Price, 49c.

FLOOR OIL DRIP PAN.

1263

Made of heavy galvanized steel. Edges reinforced with heavy rod. Placed under auto to catch oil, grease and gasoline dripping from the machinery.

No.	Size.	Regular Price.	Cash Price.
1263	35x47 in.	\$3.00	\$1.65
1264	35x95 in.	5.00	2.75

Champion Spring Set.

3240

Something you are apt to need at any time and need badly. Put up 20 assorted sizes and styles in a box for muffler cut-outs, foot brakes and automobile use generally.

No. 3240. Regular Price Per Box, 50c. Cash Price, 25c.

Individual springs can be furnished as follows:

No.	Pattern No.	Length.	Diam.	Cash Price Each.
2412	1	13-16	3-16	\$0.02
2413	2	5 1-2	9-32	.04
2414	3	5 1-2	19-64	.04
2415	4	5 1-2	11-32	.05
2416	5	6 7-8	5-16	.06
2417	6	5 1-2	7-18	.06
2418	7	10 1-2	7-16	.08
2419	8	2 5-8	3-4	.06
2420	21 $\frac{1}{2}$	4 5-8	5-8	.08
2421	21	4	11-32	.06
2422	22	5 1-4	11-16	.08

THE "BOSTON COMBINATION"

This gun handles gasoline, light oil, heavy oil, non-fluid oil, or the heaviest grease with equal facility.

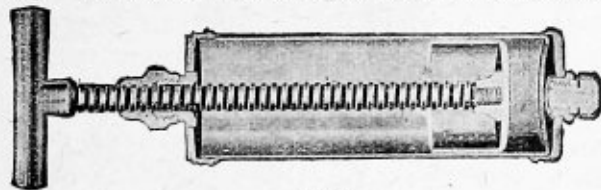
For oils and light greases it is used like an ordinary oil gun.

For handling heavy greases, the lock-nut "A" is screwed down to position "B." Then by simply turning the T handle bar, the piston is driven forward on a heavy, square screw-thread, the grease coming out in a ribbon which will pack a gear case or transmission better, quicker, and much more handily than any other method yet devised.

Remember the perfect fit of the metal plunger.

Note that the end of the barrel unscrews for easy filling with heavy grease.

Finish.—Polished brass lacquered. **Equipment.**—Oil tip, grease tip, and plug for closing. When used with gasoline, lubricate occasionally.



2247

			Reg. Price.	Cash Price.
2247	3 ounces,	4x1 1/2 in.	\$1.75	\$1.48
2248	5 ounces,	6x1 1/2 in.	2.00	1.85
2249	8 ounces,	8x1 1/2 in.	2.50	2.25
2250	10 ounces,	10x1 1/2 in.	3.00	2.75

BOULEVARD

Made with the same extreme care that characterizes all of our "B"-Line Guns.

Metal plunger ground to fit perfectly; seamless brass tube, seamless tips. Bessemer steel piston rod with T-bar. Absolutely simple in construction. Nothing to get out of order. Made in all sizes for all uses. Handles gasoline, light or heavy oils, and light greases.

Finish.—Polished brass lacquered. **Equipment.**—Oil tip, grease tip, and plug for closing.



2251

			Reg. Price.	Cash Price.
2251	3 ounces,	4x1 1/2 in.	\$1.50	\$1.35
2252	5 ounces,	6x1 1/2 in.	1.75	1.48
2253	8 ounces,	8x1 1/2 in.	2.00	1.85
2254	10 ounces,	10x1 1/2 in.	2.50	2.25

KELLOGG COMBINATION OIL AND GREASE GUN

2241

A powerful grease gun that will stand hard service. It will operate equally well with the lightest oil or the heaviest grease. For oil it is operated like an ordinary gun, an extra spout being furnished for this purpose. For grease a wheel is provided which gives a positive and powerful action. The construction

is of the rack and pinion type. Made of polished brass; very heavy.

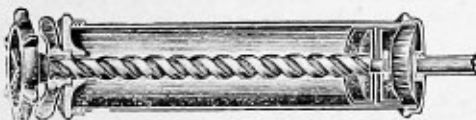
Regular Price \$2.00. Cash Price, \$1.39.

MILLERS QUICK OPERATING GREASE GUN

1225

Can be filled and emptied in 30 seconds. Capacity, 8 oz. Eight turns of the wrist and the gun is empty. Has the power to put the grease where you need it. Stream of grease 30 in. long with one turn of the wrist.

No. 1225. List Price, \$2.00. Cash Price, \$1.29.

MILLERS QUICK OPERATING COMBINATION OIL AND GREASE GUN

1226

This is an ideal combination gun, whose suction is perfect. It can be filled and emptied of heavy grease in thirty seconds. It has two spouts and is the most powerful gun yet produced. It is strong, reliable, fully guaranteed. Its caps are cast and the barrel is 17-gauge brass.

No. 1226. Capacity, 8 oz. Regular Price, \$2.50. Cash Price, \$1.90.

WILCO OIL GUN

2246

Made of brass throughout. The barrel is of extra seamless tubing. Special handle fits the fingers; impossible to bend. Oil spout is detachable. The brass knurl bushing which carries the spout is made of solid bar. This insures perfect threads.

Equipped with cork plunger. No leather washer to wear out.

No. 2246. Regular Price, \$1.25. Cash Price, 75c.

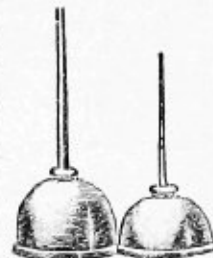
"HOWLAND" AUTO OIL CANS.

1210

Made of brass throughout.

Its convenient shape allows you to place it anywhere, and cannot leak or spill. Two sizes.

No.	Capacity.	Nozzle.	Regular Price.	Cash Price.
1210	1/2 pint	9 in.	\$1.75	\$0.75
1211	1 pint	9 in.	2.00	.90

COPPER-PLATED OIL CANS.

High-grade oilers, made of heavy metal, copper plated. Seamless body. Detachable spout.

No.	Capacity.	Nozzle.	Regular Price.	Cash Price.
1202	3 oz.	3 in.	\$0.25	\$0.10
1203	5 oz.	9 in.	.35	.18
1204	8 oz.	9 in.	.50	.25

YANKEE OIL GUN.

1213

A well-made, good quality oil-gun. Made of steel tubing, heavily brass plated and polished. Can be used with any cylinder, machine or steam oil, except grease. Leather plungers, non-detachable spout.

Barrel is 8 in long, 1 1/4 in. in diameter. **No. 1213. Regular Price, 50c. Cash Price, 29c.**

No. 1213A. Size 10 1/2 x 1 1/4. Regular Price, 75c.; cash price, 45c.

NOERA COMBINATION OIL AND GREASE GUN

2242

Size 1 1/4 x 6 1/2 in.; length of oil spout, 5 1/2 in. This is a high-grade gun at a moderate price. Spout for oil and one for grease. Fitted with a heavy cork plunger, which insures tight smooth action.

No. 2242. Reg. Price, \$1.25. Cash Price, 65c.

"KOMPAKT" OIL FLASK.

1209

Made of metal, copper plated. Nozzle reverses and makes it easy to carry with or without oil. Size 6 1/2 x 3 x 1 1/4 in. Spring slides

make it a good oil-gun.

No. 1209. Regular Price, 50c. Cash Price, 28c.

E-Z-WAY AUTO GREASE.

2298

E-Z-Way Auto Grease is the best lubricant that can be made. It is packed in a two-pound air tight metal container, from which the cap is readily removed, and a nozzle of suitable shape is put in its place. The screw plunger rod at the other end operates a plunger inside which easily forces out the required amount of grease. When the container is empty, throw it away and use the rod and nozzle on another container.

No. 2298. Light Grease. Cash Price, 35c.

No. 2299. Medium Grease. Cash Price, 35c.

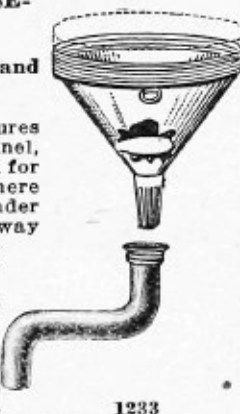
No. 2300. Heavy Grease. Cash Price, 35c.

REMOVABLE GOOSE-NECK FUNNEL.

With Brass Strainers and Movable Hoop.

It has all the features of our regular funnel, besides being adapted for use on machines where tanks are located under the body in such a way that a regular funnel is inconvenient to use.

No. 1233. Regular Price, \$2.50. Cash Price, \$1.25.
No. 1233A. Same funnel with straight spout. Cash Price, 90c.



1233

GASOLINE OVAL CHAMOIS FUNNEL.

Oval chamois funnel, for gasoline or water. Stiffened on top by heavy wire; oval in shape. Chamois for straining gasoline furnished with each funnel. Copper plated, 11 in. oval.

No. 1228. Price, \$1.50. Cash Price, 95c.

Extra goose neck for above, 35c.



1228

COMBINATION MEASURE AND FUNNEL.

Made of heavy metal, and is the handiest and most convenient article of its kind made.

1229A 1 pt. 35c. 23c.
1230A 1 qt. 40c. 29c.
1231A 2 qt. 60c. 39c.
1232A 1 gal. 75c. 55c.

Same as above, but fitted with fine brass strainer:



1229

No.	Capacity.	Regular Price.	Cash Price.
1229	1 pt.	\$0.40	\$0.29
1230	1 qt.	.45	.34
1231	2 qt.	.65	.39
1232	1 gal.	.80	.60

GASOLINE TANK FUNNEL.

1227

Extra goose neck for above, 35c.

This funnel is designed for filling gasoline tanks. The hoop around top prevents slopping, and besides a fine wire strainer, there is also an extra outside hoop for holding a chamois strainer. The fluted tubes allow the gasoline to run fast and not get air-bound. Diameter, 10 in.

No. 1227. Price, \$1.25. Cash Price, 75c.

ROUND TIN FUNNELS.

Good quality heavy tin funnels designed for the requirements of those wishing a reliable article at a very low price.

No.	Capacity.	Diam.	Cash Price.
1246	½ pt.	3½ in.	\$0.06
1247	1 pt.	5½ in.	.10
1248	1 qt.	6½ in.	.12
1249	½ gal.	9 in.	.29



1246



1252

TIN MEASURES.

Good quality, low-priced, heavy tin measures. Made to meet the demand for a low-priced measure.

No.	Capacity.	Regular Price.	Cash Price.
1252	1 gill	\$0.15	\$0.10
1253	½ pint	.18	.12
1254	1 pint	.20	.15
1255	1 quart	.35	.25
1256	½ gal.	.50	.35
1257	1 gal.	.85	.60



1260

ROUND SEPARATING FUNNEL.

Copper-plated, made in two sections. Gasoline is strained through chamois, which is fastened securely when sections are put together.

No.	Diam.	Reg. Price.	Cash Price.
1260	5 in.	\$0.50	\$0.25
1261	10 in.	1.25	.65

THE NO-CHAMOIS FUNNEL.

Will eliminate your carburetor troubles.

Just a drop of water in the gasoline will put the whole car out of commission. The only way to insure against such troubles is to positively eliminate the water from the gasoline by using a "No-Chamois" funnel, as most



1259

of the funnels do not eliminate all the water, while we absolutely guarantee that the "No-Shammy" funnel will not only positively eliminate every drop of water, but also strain faster than any other funnel made. Every funnel absolutely guaranteed. No. 1259. Size, 3x8½ in. Price, complete, \$2.00. Cash Price, \$1.60.

E. J. FLAT FUNNELS.

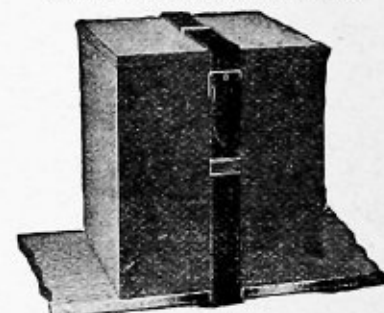
With Brass Strainers.

Heavily copper-plated; especially made for auto use. The spout is fluted, so it will not get air-bound when pouring.



1250

No.	Capac.	Length.	Width.	Height.	Reg. Price.	Cash Price.
1250	Pint	6½	3	6½	\$0.75	\$0.22
1251	Quart	9½	3½	8½	.85	.32

OIL AND GASOLINE KIT.

2301

Attached to Running Board.

This fulfills a much needed want, inasmuch as it enables the auto tourist to carry a sufficient amount of his own brand of oil for an extended tour, in a very compact and convenient form, and will pay for itself in a very short time.

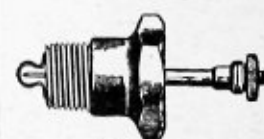
It consists of a fine black enamel steel case, similar in appearance to a steel tool box, which may be instantly strapped to the running board. It contains inside two special enamelled cans (9 in. x 4¼ in. x 3¼ in.) having a capacity of over 1½ gallons each, with special pouring spout and filler cap.

One may be used for oil and the other for a reserve supply of gasoline, or both for oil, or one can only may be used and the space occupied by other can used as storage room.

No. 2301. Regular Price, \$3.50. Cash Price, \$2.75.

"ANDERSON" GLASS SPARK PLUG.

See the Spark in Your Cylinders.



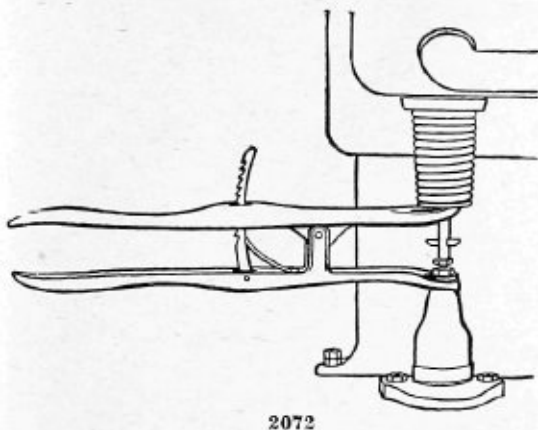
1274

No.	Size.	Regular Price.	Cash Price.
1274	½ in.	\$2.50	\$1.45
1275	Metric		
1276	A. L. A. M.		

We ship on approval any article that you may select from this catalogue, and if for any reason, after you have examined the goods, they are not entirely satisfactory, you may return them at our expense.

"WE GUARANTEE TO MAKE SHIPMENT OF YOUR ORDER THE SAME DAY AS RECEIVED."

ATLAS VALVE REMOVER.



2072

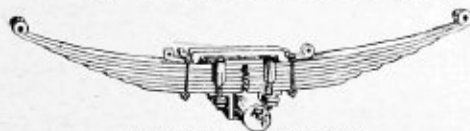
The perfect valve remover, made on an entirely new principle. Can be used on any make of car; easily and quickly adjusted. Requires no holding while pin is removed.

The ATLAS is the simplest constructed, and can be adjusted in an instant by the use of but one hand. The ratchet holds it in whatever position it is left, and leaves both hands free to remove the valve pin.

It has received the unqualified endorsement of every automobile man who has seen it.

No. 2072. Reg. price \$1.50; cash price 40c.

EMERGENCY SPRING REPAIRER.



COPYRIGHT 1903 BY AUTO TUNING REPAIRER CO.

1662

It will repair any spring on any car in a few seconds. Simply clamp it over your broken spring and you can run your car 1,000 miles just as easy as before the accident.

No. 1662. Regular Price, \$4.50; Cash Price, \$3.00.

WILCO CLEAR-GLASS



A light application of Clear-Glass on the glass front of your wind-shield will keep it absolutely clear during the rainiest or snowiest weather. The water slides from glass that has Clear-Glass on it. Your shield cannot ever become misty if Clear-Glass is applied. One application will hold good for three days. A can of it will last a season.

No.	Size.	Regular Price.	Cash Price.
2212	4-oz. bottle	\$0.50	\$0.35
2213	8-oz. jug	.75	.55

THE AUTOMOBILE BLUE BOOK FOR 1912.



1793

These volumes, now beginning their ninth year, are complete road guides for the entire United States and Eastern Canada, fully illustrated with maps, and embracing complete hotel and garage information. They are handsomely bound in royal blue leather, gold stamped, and are arranged for quick reference during the tour. They average 900 pages each, and are the most authentic and exhaustive automobile touring handbooks published, forming the basis of virtually every guide, route-card and piece of bureau information issued for the guidance of motorists. They absolutely relieve the tourist of the necessity of depending on half-obiterated signs or uncertain directions picked up at random along the roadside.

No. 1793. I. New York State and Canada. Regular Price \$2.50. Cash Price \$2.25.

No. 1794. II. New England and Maritime Provinces. Regular Price \$2.50. Cash Price \$2.25.

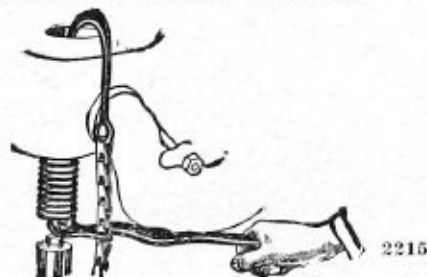
No. 1795. III. New Jersey, Pennsylvania and the Southeast. Regular Price \$2.50. Cash Price \$2.25.

No. 1796. IV. The Middle West. Regular Price \$2.50. Cash Price \$2.25.

No. 3242. V. Mississippi River to the Pacific Coast. Regular Price \$2.50. Cash Price \$2.25.

No. 2214. VI. Metropolitan Guide (New York City and vicinity). Regular Price \$2.50. Cash Price \$2.25.

FLEXIBLE VALVE REMOVER.



The chain allows quick operation around pipes and fittings. Valve replaced as quickly as removed. Trouble easily overcome if you use this tool.

No. 2215. Reg. price \$1.00; cash price 75c.

ADJUSTABLE HOSE COUPLING OR CLAMP.



2216

No.	Size.	Regular Price.	Cash Price.
2216	1/4 to 1 1/2 in.	\$0.10	\$0.08
2217	1 1/2 to 1 in.	.12	.09
2218	1 1/2 to 2 1/2 in.	.16	.12
2219	2 1/2 to 3 in.	.20	.15
2220	3 to 3 1/2 in.	.25	.20

Made from stamped brass with a brass nut and steel screen, so cannot rust fast. Instantly released or closed. Requires no tools and does not buckle hose, as the ordinary clamp does. Adjustable to measurements given, which are for the inside diameter of clamp.

SPECIAL VULCANIZING THERMOMETER.



923

The regulation thermometer used with every make of steam, electric or gasoline vulcanizer.

No. 923. Regular Price, \$1.00. Cash Price, 40c.

RUBBER PUMP TUBING.



956

Made of good quality rubber, canvas lined.

No. 956. Grey tubing, 3/16 in. hole. Per ft., Cash Price, 6c.

No. 957. Red tubing, 3/16 in. hole, extra heavy.

Per foot, Cash Price, 9c.

LEATHER PUMP WASHER.



958

No. 958. For any hand pump with cylinder 7/8 in. outside diameter. Cash Price, each, 2c.

No. 959. For pump with cylinder 1 in. outside. Cash Price, each, 3c.

No.	Size.	Cash Price.
960.	For 1 1/4 in. cylinder.....	\$0.02
961.	For 1 1/2 in. cylinder.....	.03
962.	For 1 3/4 in. cylinder.....	.03
963.	For 2 in. cylinder.....	.04
964.	For 3 in. cylinder.....	.05

HOSE BANDS.



965

Brass clamps which fit any size tire pump hose and hold pump connection firmly and prevent air from escaping.

No. 965. Cash Price, 2 for 5c., or 3c. each.

STEEL CLAMPS.



972

Especially made for water hose. Very strong.

No. 972. 3/4 in. Cash Price, 3c.

No. 973. 1 in. Cash Price, 4c.

No. 974. 1 1/4 in. Cash Price, 5c.

No. 975. 1 1/2 in. Cash Price, 6c.

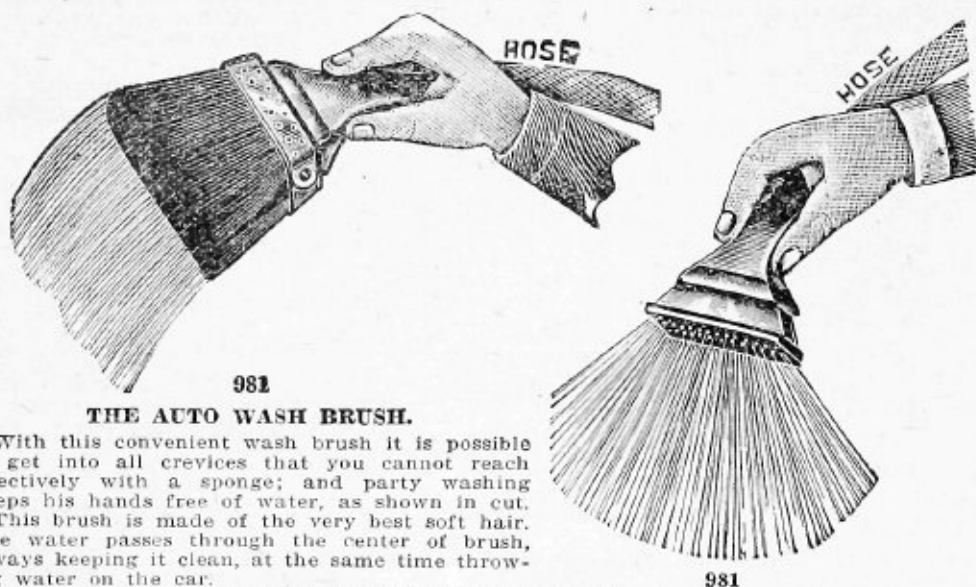
WATER HOSE.

SPECIAL FOR AUTO RADIATORS.



968

No.	Size.	Price Per Ft.	Cash Price.
968	3/4 in.	\$0.30	\$0.19
969	1 in.	.40	.24
970	1 1/4 in.	.50	.32
971	1 1/2 in.	.60	.38
971A	2 in.	.80	.49



981

THE AUTO WASH BRUSH.

With this convenient wash brush it is possible to get into all crevices that you cannot reach effectively with a sponge; and party washing keeps his hands free of water, as shown in cut.

This brush is made of the very best soft hair. The water passes through the center of brush, always keeping it clean, at the same time throwing water on the car.

The brush can be removed from its holder if required and can be used as a spray for garden purposes. It will fit on to standard hose pipe connections.

No. 981. Cash Price, \$2.25.

AUTOMATIC WATER SAVER.

966

Water always shut off, press handle down and water flows. No possible chance for waste.

It is made of brass and will outwear the hose. A child can use it.

Saves water and reduces expenses.

No. 966. To fit $\frac{3}{4}$ in. hose. Price, \$2.00. Cash Price, \$1.50.

No. 967. Spray nozzle to fit, 25c.

CONGO TIRE AND MAT REVIVER

2221

Makes dirty and old tires look like new. Prevents sun cracks and will add to life of tire. Ideal for renovating running-board mats. Put up in 16-oz. cans.

No. 221. Reg. price 50c.; cash price 30c.



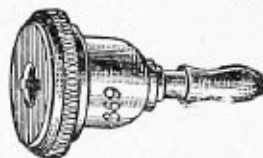
2222

MINEOLA OIL CHASER

This is the only thing on the market to-day that will clean off oiled dirt from your automobile body without injury to the varnish. Mineola not only does remove these spots but leaves the body bright and clean.

No. 2222. 8-oz. can Reg. price, 50c.; cash price 35c.

No. 2223. 1-gal. can Reg. price \$8.00; cash price \$4.75.

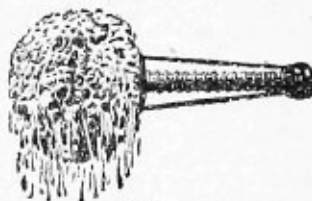
"ECLAIR" CONNECTION.

953

Fitted with a rubber washer that fits tightly over valve. Absolutely air tight, quick adjusting, practical and handy. No screwing or unscrewing, simply slips over valve and pulls off again. Washers last longer than brass threads.

No. 953. "Eclair" connection, Cash Price, 9c.

No. 954. Extra rubber washers, each, 2c.

IDEAL WASHERS.

979

It can be attached to any garden hose for use with sponge. Helps to wash in less time and work is done easily. Saves water, time and money and

reaches into confined places.

No. 979. Regular Price, \$3.00. Cash Price, \$1.10. With sponge \$1.50.

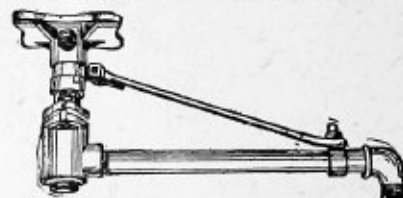
DIXON'S PIPE-JOINT COMPOUND.

1632A

Invaluable for all steam, gas and water piping as well as for smearing gaskets on flange joints and for bolts, screws, etc.

No. 1633A. $\frac{1}{4}$ lb. tube. Cash Price, 12c.

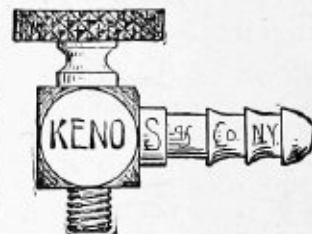
No. 1634. 1 lb. can. Cash Price, 20c.

THE EVER-READY WASHER.

980

This washer is a neat looking device painted in aluminum, with the hose arm $4\frac{1}{4}$ ft. long. The depth of the washer from the ceiling is only 8 in., and the weight is 14 lbs. packed for shipment.

No. 980. List Price, \$15.00. Cash Price, \$9.75.



948

KENO PUMP CONNECTION.

The best, old, reliable pump connection made.

Steel threaded part is indestructible.

No. 948. Regular Price, 20c. Cash Price, 10c.

EMERY CLOTH.

994

The very best quality. Acknowledged the best make on the American market.

No.	Grade.	Regular Price.	Cash Price Per Doz.
994	Fine	\$0.50	\$0.28
995	Medium	.60	.33
996	Coarse	.70	.38

ROUND LEATHER BELTING.

997

Specially prepared leather belting.

Used for water or oil pumps or fans.

Cut to any length desired.

No.	Diameter.	Regular Price.	Cash Price Per Foot.
997	$\frac{1}{4}$ in.	\$0.10	\$0.01
998	$\frac{5}{16}$ in.	.12	.06
999	$\frac{3}{8}$ in.	.15	.08

"MORAN'S" BELT COUPLING.

The best coupling on the market for connecting round leather belts. Three sizes in stock.



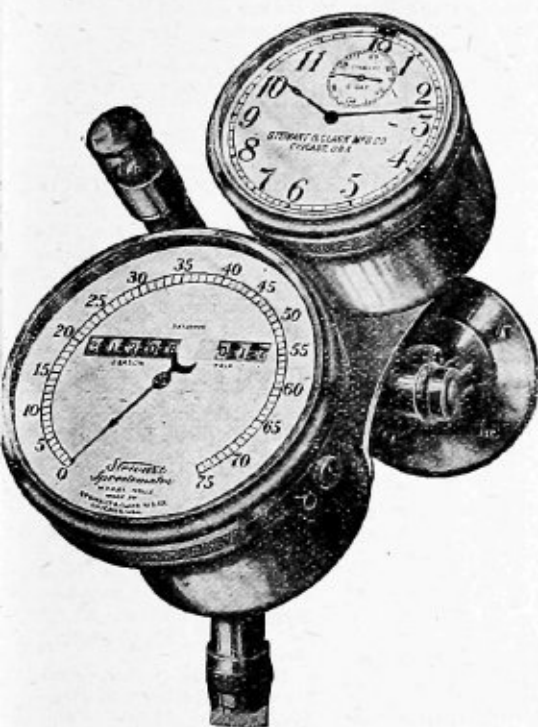
1000

No.	For Belts Diameter.	Regular Price.	Cash Price.
1000	$\frac{1}{4}$ in.		
1001	$\frac{5}{16}$ in.	\$0.15	\$0.09
1002	$\frac{3}{8}$ in.		

IF YOU WANT WHAT YOU WANT WHEN YOU WANT IT, PLACE YOUR ORDER WITH US.

1912 STEWART MAGNETIC SPEEDOMETER

Embodying Many New Features, Making It Unquestionably Superior to All Others From Any Standpoint



Model 29. Four-inch dial, 75-mile speedometer, 100,000-mile season odometer, 100-mile trip register, can be reset to any tenth of a mile, combined with Seth Thomas 8-day rim wind, rim set clock, electric light. Price, \$70.00.

Model 10. Four-inch dial, 60-mile speedometer, 100,000-mile season odometer, 100-mile trip register, can be reset to any tenth of a mile, combined with Seth Thomas 8-day rim wind, rim set clock, electric light. Price, \$65.00.

Model 28. Three-inch dial, 60-mile speedometer, 100,000-mile season odometer, 100-mile trip register, can be reset to any tenth of a mile, combined with Seth Thomas 8-day rim wind, rim set clock, electric light. Price, \$60.00.

Model 46. Four-inch dial, 75-mile speedometer, 100,000-mile season odometer, 100-mile trip register, can be reset to any tenth of a mile, combined with Stewart 8-day rim wind, rim set clock, electric light. Price, \$55.00.

Model 35. Four-inch dial, 60-mile speedometer, 100,000-mile season odometer, 100-mile trip register, can be reset to any tenth of a mile, combined with Stewart 8-day rim wind, rim set clock, electric light. Price, \$50.00.

Model 34. Three-inch dial, 60-mile speedometer, 100,000-mile season odometer, 100-mile trip register, can be reset to any tenth of a mile, combined with Stewart 8-day rim wind, rim set clock, electric light. Price, \$45.00.

Model 32. Three-inch dial, 60-mile speedometer, 100,000-mile season odometer, 100-mile trip register, can be reset to any tenth of a mile, equipped with watch. Price, \$25.00.

An Unbreakable Swivel Joint

The members of which are DROP FORGED from alloy steel, hardened and heat treated. Unbreakable in every sense of the word, by any combination of use or abuse, a swivel joint that will outlast half a dozen automobiles. To forge, machine and harden this one part of the Stewart Speedometer, we have erected a new addition to our plant, at a cost of \$100,000.

An Improved Odometer

That is extremely simple, strong and without springs. The dials are discs of celluloid actuated by a series of intermittent gears, the action of which is positive—no possible slip—every revolution of the road wheel must be accounted for; 100,000-mile season, 100-mile trip register—can be set back to any tenth of a mile.

An Unbreakable Flexible Shaft

That will stand up even under most flagrant misuse—SO STRONG THAT YOU CAN TIE IT INTO A KNOT WITHOUT BREAKING IT—the inner wall is of tough three-quarter round spring wire coiled into a cylinder. The inside surface is flat to insure a smooth bearing for the driving chain. The outside wall or sheathing is of brass wire, triangular shaped, which is forced into the interstices of the steel inner case. This method of construction builds up a strong body and prevents the lubricant from working through. The outside surface of the casing is smooth. The driving means is made up of links, one hooked into another, the same as used heretofore, which twenty years' experience has proved to be the best possible construction.

An Indicating Means Unaffected by Temperature Changes

Constructed of an alloy discovered by our engineers, of which the temperature coefficient is NIL. Where aluminum is used, changes in temperature, of course, change the resistance of the aluminum which results in the uncompensated speedometer indicating a different speed on a hot day than on a cold day—a difference up to 14 miles or 23 per cent. Stewart Speedometers are the only magnetic instruments correct at all temperatures.

Other Improvements

The road wheel gears are heavy cast malleable in place of light sheet steel. Teeth are milled, not cast—a perfect involute tooth of wide surface which, in connection with fibre pinions, insures quiet running and long service. The new road wheel clamp is stronger than ever holding the swivel point and pinion rigidly to the steering arm preventing any possibility of the gears getting out of mesh.

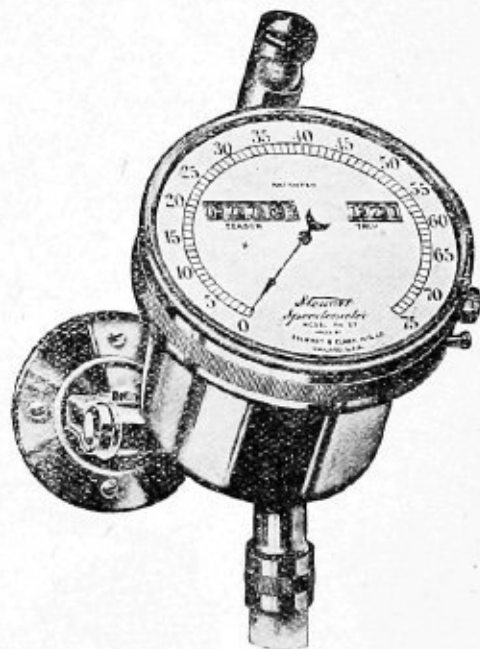
Rim Wind and Rim Set Clocks

The rim wind has been an exclusive feature of clocks used in combination with Stewart Speedometers, permitting winding of the clock without a key—merely turning the rim. This feature has been perfected so as to embody a means of setting the clock by pulling out and turning the rim, which moves the hands to any position desired. Seth Thomas clocks we have found to be the

best movements ever produced for automobile use.

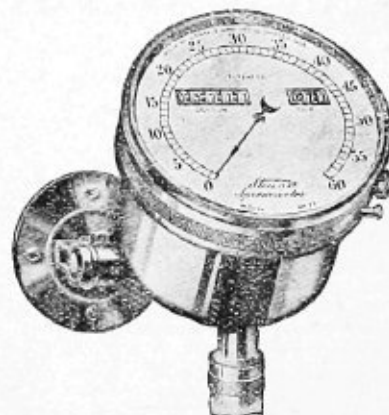
Stewart Speedometers embody the best there is in material, workmanship and construction. There are none as good at any price. They are made in the largest and best equipped speedometer plant in the world.

STEWART SPEEDOMETERS ARE ACCURATE AND DEPENDABLE.



Model 27. Four-inch dial, 75-mile speedometer, 100,000-mile season odometer, 100-mile trip register, can be reset to any tenth of a mile, electric light. Price, \$30.00.

Model 11. Four-inch dial, 60-mile speedometer, 100,000-mile season odometer, 100-mile trip register, can be reset to any tenth of a mile. Price, \$25.00.



Model 26. Three-inch dial, 60-mile speedometer, 100,000-mile season odometer, 100-mile trip register, can be reset to any tenth of a mile. Price, \$20.00.

Above Prices Subject to a Discount of 5% for Cash

REMEMBER WE PREPAY TRANSPORTATION CHARGES—SEE INSIDE FRONT COVER.

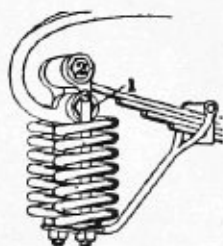
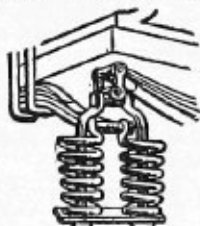
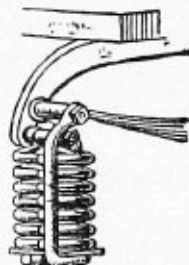
VULCAN AUTO SPRINGS



TYPE A

You no longer have to pay the manufacturer of your car or his agent half the price of the car for a new spring. We are able now to furnish you with new springs at very low prices. Every Vulcan spring is guaranteed for one year from date of purchase, the guarantee card being tagged to each spring. The different styles we carry fit about 60 makes of cars. In ordering give us the measurement of the spring wanted from center of eye to center of eye in a straight line and from center of eye to axle bolt from both ends (on many springs the axle bolt is not in the center of spring). All Vulcan springs are fitted with rebound clips and lipped to prevent side play of leaves. Space will not permit us to illustrate but one style or to give prices on all springs. Below are given our net cash prices on springs for some of the most popular cars. If you don't see what you want write for the price on same.

Stock No.	Car That This Flts. Spring.	General Explanation.	Stock Colors.	Size.	Net Cash Price. Each.
1	Ford	A Replaces front spring on any Ford four-cylinder model N-R-S-T.	black	32 x 1½	\$3.75
2	Ford	A Rear spring for all Ford T cars.	black	46 x 2	11.00
4	Overland	A Front spring for Overlands 38 and 59 and all Overlands from 20 to 30 h. p. which use springs 1¾ wide and not over 36 long	black	19 x 16	3.75
5	Overland	A Lower half of rear spring for all OVERLANDS which use a type B spring.	black	35 x 1¾	3.75
6	Overland	A Upper half of rear spring for all Overland cars which use a type B spring.	black	35 x 1¾	4.25
8	Buick	A Front spring for Buick 10-26-27-32 and all Buicks of four-cylinder type with cylinders 4x4 or smaller	cream, red, or black	35 x 1½	3.75
9	Buick	A Lower half of rear spring on all Buicks described in No. 8.	cream, red or blk	38 x 1¾	3.75
10½	Buick	B Upper half of rear spring on all Buicks described in No. 8.	cream, red or blk	38 x 1¾	3.75
12	E. M. F.	A Front spring to fit all E. M. F. 30 cars up to 1912	cream	2 x 35	5.00
13	E. M. F.	A Lower half of rear spring to fit all E. M. F. 30 cars up to 1912	or black	14¾ x 21¼	5.00
			cream	37 x 2	5.00

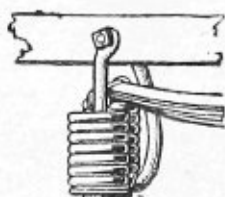
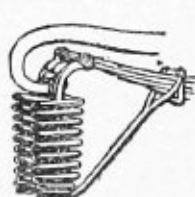
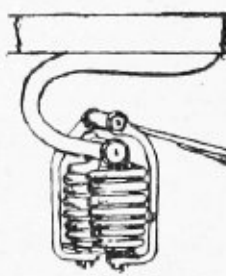
THE SUPPLEMENTARY SPIRAL SPRING
The Genuine Springs as Sold by Us.No. 1
Curved Hanger,
body loop.No. 3
Full Elliptic.No. 4
Platform Spring.No. 2
Outside Hanger,
carrying spring
on Stud End.

We handle the genuine St. Louis springs, the original and only springs that we can guarantee to give satisfaction and fit. Over 25,000 cars equipped since 1903.

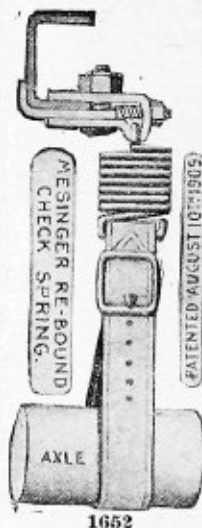
No.	Cars.	Per Full Set.	Per Half Set.
1648	Light weight	\$25.00	\$15.00
1649	Medium weight	30.00	17.50
1650	Heavy weight	35.00	20.00
1651	With limousine bodies	40.00	22.00
1651A	Commercial Vehicles	50.00	27.50

Write for our cash price for above springs. Order by number. State model, make and year of car.

The life of the Supplementary Spiral Spring is almost everlasting. It is unequalled as a "shock" absorber. We furnish with each shipment full and complete directions how springs should be applied, and any one reasonably familiar with mechanics can put them on a car.

No. 5
Shackles attached
direct to spring
above spring and
used on front.No. 6
Curved Hanger,
Shackles attached
to hanger
below spring end
used on front.No. 7
Scroll End-Spring.

MESINGER SINGLE RE-BOUND CHECK SPRING.



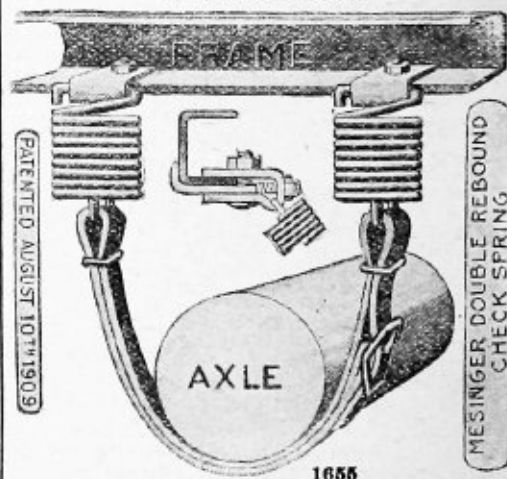
A shock absorber, effective, simple, inexpensive, strong and easy to attach to any automobile, is all concentrated in the Mesinger Re-Bound Check Spring, which checks the rebound evenly. Can be attached to steel or wood frame, quick and permanently, at no expense. Made in 3 sizes.

No. 1652. For cars up to 1,200 lbs. Regular Price, \$3.50. Cash Price, \$2.00 per pair.

No. 1653. For cars from 1,200 to 1,800 lbs. Regular price, \$5.50. Cash Price, \$3.25 per pair.

No. 1654. For cars from 1,800 lbs. up. Regular Price, \$7.50. Cash Price, \$4.00 per pair.

"MESINGER" DOUBLE RE-BOUND CHECK SPRING.



Clamps on to the frame. Designed especially for cars with full elliptic springs and where the single springs, on account of clips or brake parts being in the way, cannot be attached.

The double spring will give wonderful results on any car and is easily and securely attached by any one in ten minutes. Not drilling of holes necessary. Saves tires, springs, machinery and all bumps.

No.	Price Per Pair.	Cash Price.
1655	Runabouts	\$4.50
1656	Medium cars	6.75
1657	Heavy cars	9.00

REMEMBER WE PREPAY TRANSPORTATION CHARGES—SEE INSIDE FRONT COVER.

TRUFFAULT-HARTFORD SHOCK ABSORBER. "The Standard of the World."

The Truffault-Hartford Shock Absorber properly controls the springs, insuring for them their maximum efficiency, practically eliminating the possibility of breakage and promoting comfortable riding over rough roads.

Springs, subjected to excessive oscillation if they do not break, will deteriorate in efficiency in a remarkably short time. The Truffault-Hartford prevents excessive oscillation, practically precluding the possibility of breakage, maintaining the original efficiency of the springs, adding to their life.

The Truffault-Hartford is the pioneer shock absorber—the only successful device of its kind. It positively prevents violent action of the springs without detracting an iota from their flexibility.

It eliminates pitching and side swaying, insuring comfort to the occupants of a car even while traveling over the roughest roads.

It makes spring breakage a thing of the past.

It so lessens vibration, jolt and jar, relieving the car's machinery and parts from the racking incident to them, that years are added to the life of a car by its use.

Made in four sizes. Mention make, year and model of car when ordering. All Roads are Smooth Roads with Truffault-Hartfords.

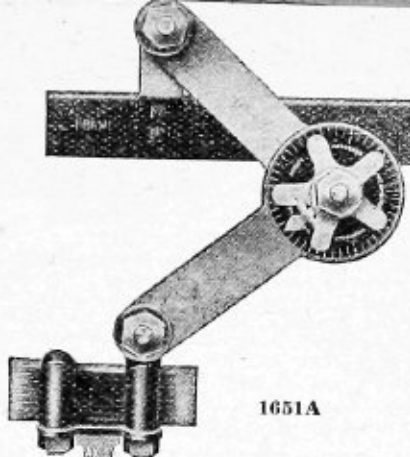
No. 1651A. Standard Model for cars over 2,500 lbs. Four shock absorbers. Cash Price, \$60.00.

No. 1651B. Intermediate Model for cars from 1,400 to 2,500 lbs. Four shock absorbers. Cash Price, \$45.00.

No. 1651C. "Junior" Model for the smaller cars weighing up to 1,400 lbs. Like the Little Ford, Maxwell, Reno and Buick runabouts. Four shock absorbers. Cash Price, \$25.00.

No. 1651D. Juniorette, suitable for light runabouts such as Fords, etc., weighing up to 1,200 lbs. Cash Price, \$15.00.

The above prices include all special fittings necessary to attach same to your car. Any mechanic can fit them, or we will do so at a cost of \$5.00 extra.

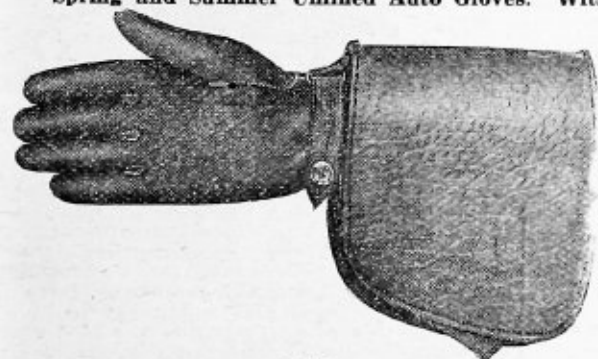


1651A

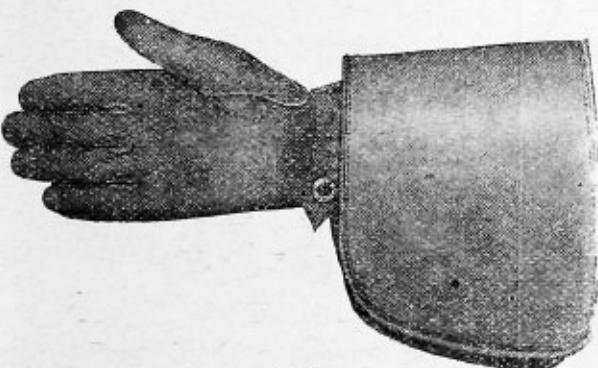
STANDARD

RIPON BRAND.

Spring and Summer Unlined Auto Gloves. Without Doubt the Finest Ever Made.



2212



2203

All of these gloves are made from select stock and are designed to give the wearer an easy, perfect fitting glove. Also a neat, tasty appearance. The gauntlets are large and leather lined, cut on a pattern which has given general satisfaction to auto drivers.

No. 2201. Men's black auto gauntlet, coltskin, plain gauntlet, strap fastener at wrist; special patent thumb, table cut. Regular Price, \$5.00. Cash Price, \$3.50.

No. 2212. Men's black auto gauntlet, made from imported Peccary hog skin, table cut, strap fastener at wrist, walruscuff, soft and pliable, will stand exceptionally hard usage (See cut No. 1). Regular Price, \$5.00. Cash Price, \$3.50.

No. 2204. Men's black auto gauntlet, made from imported cape, table cut, strap fastener at wrist, walrus cuff which is large and comfortable. A splendid wearing love. (See cut No. 1.) Regular Price, \$3.50. Cash Price, \$2.50.

No. 2203. Men's black coltskin auto gauntlet, made from black coltskin, table cut, strap fastener at wrist, plain black cuff, very soft and pliable unsurpassed for wearing. (See cut No. 2.) Regular Price, \$3.50. Cash Price, \$2.50.

No. 2127. Men's black auto gauntlet, made from black imported cape. The gauntlet on this glove is somewhat smaller than on the others. Regular Price, \$3.00. Cash Price, \$2.25.

No. 1764. Men's black auto gauntlet made from black cape with a cloth gauntlet reinforced with a leather lining. (See cut No. 2.) Regular Price, \$2.50. Cash Price, \$2.00.

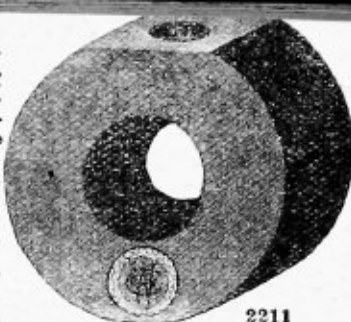
No. 2333. Men's black auto gauntlet, made from select goatskin. An exceptionally good glove for the money. Regular Price, \$3.00. Cash Price, \$1.25.

ROUND BUMPER.

Made of rubber compound to withstand severe service.

No. 2211. Size 3 1/4 in. high, 1 1/2 in. hole; width, 1 1/2 in.

Regular Price, 75c. Cash Price, 40c.



2211



3246

BOW SEPARATORS.

Used on Auto Tops. Prevents bending and breaking of bows. Furnished in Brass or Black.

No. 3246. Black Japanned (2 pieces). Cash Price, 5c.

No. 3247. Brass Finish (2 pieces). Cash Price, 8c.



3248

BOW REST.

No. 3248. Black Japanned. Cash Price, 25c.

No. 3249. Brass Finish. Cash Price, 45c.

RUBBER SPRING BUMPERS.



1658

These bumpers are intended for use between springs, to take up the shocks when going over rough roads. Bumpers prevent breaking of your springs. Very best quality rubber in four sizes.

	High.	Wide.	Long.	Regular Price.	Cash Price.
No.	In.	In.	In.		
1658	3	1 1/2	6 1/2	\$0.75	\$0.43
1659	3 1/2	1 1/2	8	1.00	.55
1660	4	1 1/2	8 1/2	1.50	.75
1661	Leather straps for same.			.15	.15



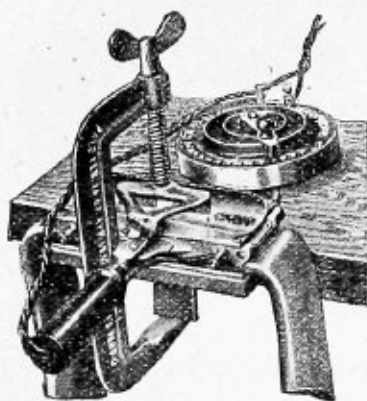
BOW SEPARATORS.



Made of high-grade rubber. A necessary article. Prevents chafing of material and bending or breaking of bows and sockets. Serves to hold top firmly in position when folded. Complete with straps to attach.

		Regular Price.	Cash Price.
No.	Bow Set.		
1663	3	\$2.00	\$0.49
1664	4	2.50	.59
1665	5	3.00	.79

REMEMBER WE PREPAY TRANSPORTATION CHARGES—SEE INSIDE FRONT COVER.

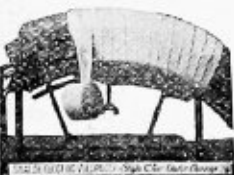


917

Type B Repairing Inner Tube

operate on both direct and alternating current this is the only Vulcanizer which will give maximum results. It is designed to stand the hard, steady service of a public garage. (b) It has an extra double concave face which gives additional service for vulcanizing casings. (c) It is furnished with 20 feet of conducting cord.

No. 917. Type B 51—Iron Model\$20.00
No. 918. Type B 61—Nickel Plate Aluminum Model 25.00



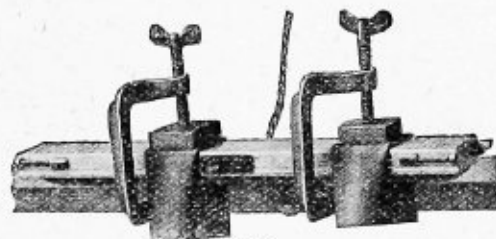
919

Type C in Operation

TYPE C—(Exclusively for Outer Casing).

Type C will mend any blow-out or tear in a casing that is possible to mend and will fix any size tire. Heat is applied inside of tire, right against the new fabric. Type B or D is used with Type C to vulcanize a tread.

No. 919. Type C 71—For Alternating Current only.....\$20.00
No. 920. Type C 72—For Direct Current only..... 25.00

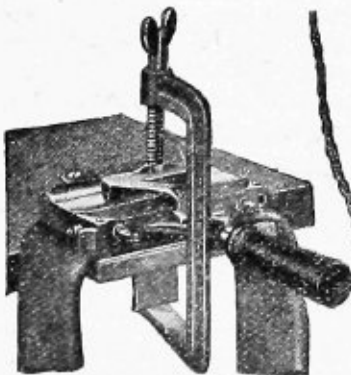


2319

TYPE E OR "GANG."

Type E, 24 inches long, will vulcanize six tubes at a time, or will mend a two-foot slit at one setting. It is furnished with four patented clamps and four blocks for four sizes of repairs.

No. 2319. Type E 91—Alternating current, \$25.00.
No. 2320. Type E 92—Direct current, \$30.00.



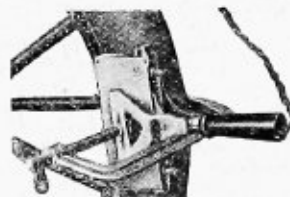
921

Type D Repairing Inner Tube Para rubber, etc.

No. 921. Type D 81—Iron Model for alternating current.....\$12.50
No. 922. Type D 82—Nickel Plate Model for alternating current..... 15.00
No. 2321. Type D 83—Iron Model for direct current..... 12.50
No. 2322. Type D 84—Nickel Plate Model for direct current..... 15.00

TYPE D—(Portable).

Type D is expressly for auto owners. It is light and compact. Has a flat face for vulcanizing anything from a nail hole to a two-foot slit in an inner tube, and a concave face for vulcanizing any size casing while still on the wheel. This concave face has one curved edge for repairing rim cuts. It has an automatic heat control so that the exact vulcanizing temperature will be maintained without regulation and there will be no danger of burning the tire or breaking the heat gauge. The patented heat unit conducts the heat evenly to every part of the tire. A 7x3½-inch repair can be made at one setting or two tubes can be repaired at the same time. Furnished complete with 10 feet of conducting cord, heat gauge, cement, Para rubber, etc.



921

Repairing Casing



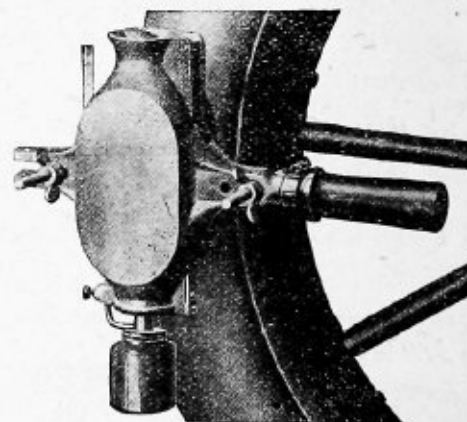
2323

Repairing Inner Tube gives automatic and exact control so that it needs no watching. It is impossible to burn the tire or break the heat gauge by overheating. Breaking of the heat gauge by dropping is also done away with by the patent spring thermometer holder. The vulcanizer is so compact that it can be carried in a tool kit 12x7½x3 inches, and can be used anywhere. The vulcanizing

SHALER STITCH. In Time Vulcanizer. (Alcohol Heated.)

This Vulcanizer is made expressly for automobile owners and for repair shops and garages that do not have access to the electric current.

It is heated by an alcohol lamp at an expense of about 1 cent per hour. The temperature is regulated by a thermostat which

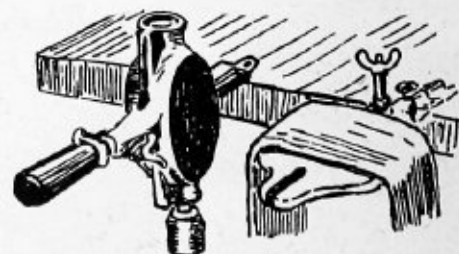


2323

Repairing Casing

surface is 3x5 inches, and a repair as much larger as desired can be made by resetting the vulcanizer. There are two vulcanizing surfaces—a flat face for vulcanizing inner tubes and a concave face for vulcanizing any sized casing without removing it from the rim. There is also a bracket to hold the vulcanizer while preparing the tire, and a patent handle so that the vulcanizer can be moved from one repair to another without cooling.

This outfit is complete with case, clamps



2323

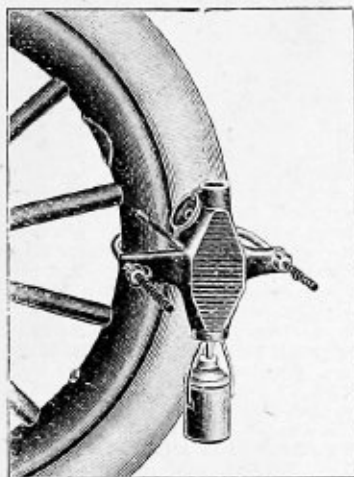
Heating Vulcanizer while Preparing Tire for tubes and casing work, gauge, cement, Para rubber, alcohol container and a full set of directions.

No. 2323. Price Complete, \$10.00

SENSATIONAL VULCANIZER PROPOSITION Learn to Vulcanize Your Own Tires and Inner Tubes and Save the Cost of Big Repair Bills

ANY VULCANIZER ON THIS PAGE FOR \$3.50

When the Shaler Co., manufacturers of the famous Shaler Electric Vulcanizers, bought the patent rights covering Stitch-in-Time Vulcanizers the manufacturers of same had on hand a large number of Stitch-in-Time Vulcanizers that they wanted to move quickly. After much spirited bidding we secured the entire lot at prices way below their actual value, and we are going to give our customers the benefit of this purchase while the stock lasts. These vulcanizers have never before been sold to the consumer for less than \$7.50, \$9.00 and \$10.00 each. Each outfit is complete with heater, cement and rubber for repair work, thermometer, etc., and in perfect condition.



3250 Type A Stitch-in-Time

THE ORIGINAL STITCH-IN-TIME VULCANIZER

Our Stitch-in-Time will make repairs on the outer casing of any size tire, even right down against the rim. It will vulcanize inner tubes, and is so small and compact that it can be carried in the tool box of an automobile. Being adapted to be heated by acetylene or gasoline, you can take it along on the road and make a repair by the roadside.

Full directions with each outfit.

Prices of Stitch-in-Time

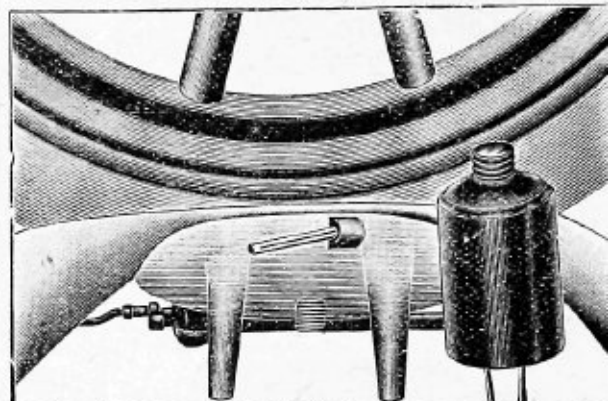
No. 3250 Type A has two different oval faces, 2x3 in., weighs 6 lbs. boxed, gas, gasoline or acetylene heater (vulcanizer alone weighs 2 lbs.).

Regular Price, \$7.50. Cash Price, \$3.50.

No. 3251 Type C has two different oval faces, 2x3 in., weighs 6 lbs. boxed, gas, gasoline or acetylene heater, tube-repairing table, and extra yoke for tack and nail punctures.

Regular Price, \$9.00. Cash Price, \$3.50.

THE "PIG" VULCANIZER



3252 Pig Vulcanizer

Patented March 13, 1906

Weight of Car Gives the Pressure

The "Pig" Vulcanizer works upon the same principles as our "Stitch-in-Time" Vulcanizer, which has proven so universally popular.

A "Pig" Vulcanizer will make a patch from 8 to 10 inches long the full oval of the tire to within two inches of the rim, one application. A "Pig" Vulcanizer will mend a blowout by vulcanizing a fabric patch over the inside of the hole in the casing at the same time the outside rubber is being vulcanized. The above cut shows Vulcanizer working on big blowout of inner tube.

In ordering be particular to give the size of your tires.

No. 3252. Reg. Price, \$10.00. Cash Price, \$3.50.



PATENT PENDING

3253



PATENT PENDING

3253

The Imperial Vulcanizer eliminates the old-time use of cement and acid. We furnish a specially prepared rubber for patching to be used as per directions.

THE IMPERIAL VULCANIZER

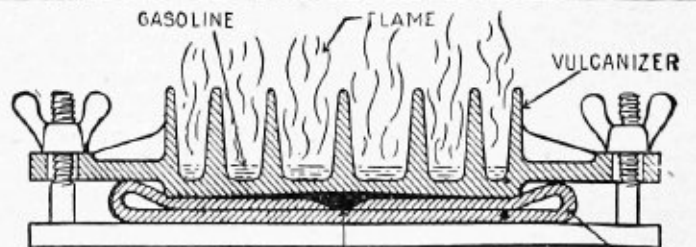
**The Only Practical Portable
Vulcanizing Repair Kit**

The fundamental principle employed, and as covered by our patents, is the ideal condition of a gradual uniform rise of temperature until maximum heat is attained; the retention of this heat for a predetermined period then a gradual uniform descent of temperature and, at a fixed time, the removal of the goods; this fixed time being when the vulcanizing heat is just waning and before the mould or metal plates become cold.

Exact and uniform temperatures must be obtained, otherwise the product is either under or over cured or vulcanized. In this invention ideal conditions are obtained automatically, the flame from the burning liquid impinging or burning against the conical projections as well as the cylindrical wall of the cup or basin, conducts downward the heat thus generated and uniformly distributes it over the face of the vulcanizing plate or element. Just at this moment, when the combustion heats the cones and side walls almost to a

Application.—Place the tube centrally between the two plates of the vulcanizer; fasten securely with the thumbscrews.

Vulcanization.—The gasoline is



REPAIR RUBBER

3252

higher temperature than desired, the automatic features develop. The flame rises higher; in fact, above the conical pins and side walls of the cup or basin, this space now being occupied by the gases which automatically dampen down the heat until the liquid fuel falls in temperature, thus allowing causing the flame to drop lower, impinging upon the heating members and becoming effective. The liquid fuel covering the bottom of the basin and surrounding the base of the conical pins or projections, tempers down the heat from otherwise serious proportions.

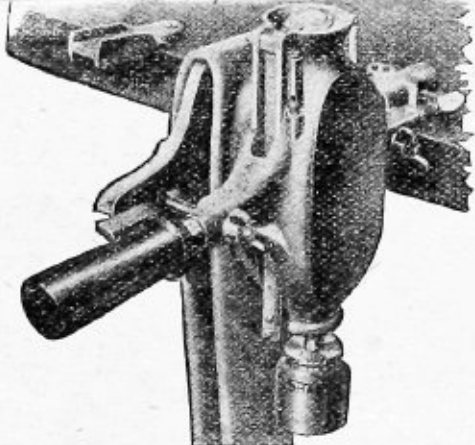
This unique principle produces the most simple known device for vulcanizing. It is necessary to state that the raw, unvulcanized rubber used in this process is specially prepared to cure or vulcanize by the operation of this apparatus.

placed in pronged receptacle and ignited. A perfect vulcanization is completed in 15 minutes.

No. 3253. The Imperial Repair Kit comprising Imperial

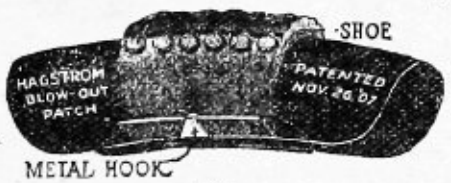
Vulcanizer, Gasoline Gauge and Cloth, Shears, Emery Paper and specially prepared Rubber sufficient for 40 punctures, complete for \$3.50.

REMEMBER WE PREPAY TRANSPORTATION CHARGES—SEE INSIDE FRONT COVER.



3254

HAGSTROM BLOW-OUT PATCH.

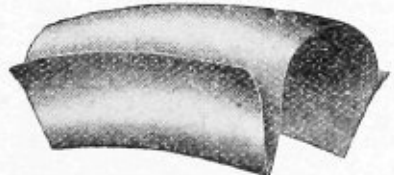


708

Made from the best fabric known for automobile shoes, covered with a good grade of rubber, vulcanized by the live steam process and made flexible on the sides and edges so as not to chafe the inner tube. They are made in a mould so that they show a finished and attractive appearance. In ordering mention style and make of tires. They are made to fit all sizes of shoes, for the Clincher, Dunlop, Fisk Bolted On Quick Detachable or Universal rims. State size and style required. In every case where order does not specify style of hook desired, we send sleeves fitted with Clincher hooks.

No.	Shoe.	List Price.	Cash Price.
708	2 1/2 in.	\$1.75	\$1.00
709	3 in.	2.00	1.35
710	3 1/2 in.	2.25	1.40
711	4 in.	2.50	1.50
712	4 1/2 in.	2.75	1.80
713	5 in.	3.50	2.10

SHUR-HOLD BLOW-OUT PATCH



2314

Made of Rubber and Fabric. Fits inside of outer casing perfectly. Flaps on either side prevents any creeping or bulging. Made of heaviest fabric and protects the tube from any damage in the worst blow out.

No.	Size.	Regular Price.	Cash Price.
2314	3 in.	\$1.50	\$0.40
2315	3 1/2 in.	1.75	.45
2316	4 in.	2.00	.45
2317	4 1/2 in.	2.25	.55
2318	5 in.	2.50	.55

SHALER STEAM VULCANIZER
For use on the Farm or by the Roadside as well as in the City.

The only vulcanizer for use where electric current is inaccessible—not because of the steam it contains, but because a thermostat holds the temperature at the vulcanizing point automatically.

The patent alcohol generator creates an intense flame, producing the vulcanizing temperature, 265 degrees, in a few minutes. At this point the thermostat expands, closing a damper sufficiently to maintain the vulcanizing temperature, absolutely preventing injury to the tire or brakeage of the heat gauge. Vulcanizing depends on temperature, not on any mysterious property of the steam. The function of the steam is to insure a uniform heat distribution, preventing overcuring one part of the repair and undercuring another. The Shaler, in addition to being the only steam vulcanizer with automatic temperature control, is the only one that has the precaution of a safety valve, absolutely eliminating the danger of explosion.

As the temperature control needs no watching, the repair is made ready while vulcanizer is heating—a big saving in time. The patent handle permits it to be applied while hot, and moved from one repair to another without cooling.

Vulcanizing surface 3x5 inches. Larger repairs are easily made by resetting vulcanizer. One side of the heater is flat for mending tube injuries, from a nail hole to a two foot slit. Tubes are vulcanized on a metal shelf inlaid with asbestos to prevent radiation and reduce the time for vulcanizing. The opposite side is concave, shaped to fit anywhere on any sized casing without removing it from rim. Enables any motorist or chauffeur to seal cuts, sand-pockets, etc., thereby excluding moisture from the fabric and greatly increasing the mileage of his tires.

Furnished complete with case, clamps for tube and casing work, U. S. Gov't. tested heat gauge, cement. Para rubber, alcohol container and an illustrated book of instructions. Can be carried in tool kit.

No. 3254. Type S No. 22 Shaler Steam Vulcanizer, \$12.50.



718

To insert the Never Kleep Tire Shoe, work with your two hands, take off your tire and cleanse well with gasoline inside the casing just around the tear or blow-out. As it is already prepared with cement, it will stick where you put it. You need no clamps, laces or iron rods to plaster the same in casing. All can be done in a few minutes' time by any one.

No. 718. Repairs 2 1/2 in. and 3 in. sections. List Price, \$1.00 each. Cash Price, 75c. each.
No. 719. Repairs 3 1/2 and 4 in. sections. List Price, \$1.25 each. Cash Price, 95c. each.
No. 720. Repairs 4 1/2 and 5 in. sections. List Price, \$1.50 each. Cash Price, \$1.10 each.

CONTINENTAL TIRE PLASTER PATCHES.



714

This patch is made of heavy frictioned fabric on one side with bareback fabric backing on the other and is heavily reinforced to protect the tube when placed over blow-outs in casings. The end of the patch fits down over bead of the tire and stays there.

No.	Plaster For	List Price.	Cash Price.
714	2 1/2, 3 in.	\$0.50	\$0.25
715	3 1/2, 4 in.	.75	.45
716	4 1/2, 5 in.	1.25	.75

EXTRA HEAVY RUBBER OUTSIDE TIRE BAND.



This sleeve will answer the same purpose as our chrome leather bands, except it is made of heavy rubber and fabric, the same as outer casings — consequently it will last much longer.

No.	Size.	Regular Price.	Cash Price.
736	2 1/2 in.	\$1.75	\$0.70
737	3 in.	1.75	.70
738	3 1/2 in.	2.00	.80
739	4 in.	2.00	.90
740	4 1/2 in.	2.75	1.00
741	5 in.	2.75	1.00

THE EMERGENCY BAND. Chrome Leather.



734

The emergency band is a necessity for automobile touring, and every autoist should carry one at least, to be safe from tire trouble. This tire band is made of mineral chrome tanned leather, which wears like rubber, is tough, soft and pliable; water does not affect it. Heavy strong eyelets are in the sides through which the band is secured with a strong Rawhide lacing.

No.	For Tires.	List Price.	Cash Price.
729	2 1/2 in.	\$0.75	\$0.30
731	3 1/2 in.	.90	.50
733	4 1/2 in.	1.10	.65
735	Extra laces, each	.20	.10

CONGO VULCO-NU-TREAD OUTFIT



915

The old expression "A stitch in time" is particularly applicable to fixing a cut in an outer casing. A hole or cut, no matter how small in the beginning, will in a short time cause

serious damage to the tire, owing to the sand and water working the tread loose from the fabric of the shoe.

Tires should be closely examined after each trip, and if a cut is discovered, it should be immediately scraped out with a blunt knife, sand papered and Vulco-Nu-Tread preparation used to fill it up. The Vulcanoid will vulcanize the Nu-Tread in the cut, and when dry it is as solid as the rest of the tread.

Every owner who desires to have his tires last should get one of these outfits. It saves both time and money.

Each outfit packed complete in wooden box with full directions.

No. 915. Regular Price, \$1.00. Cash Price, 59c.

C. O. T. CEMENT AND ACID.



900

No.	Quantity.	Regular Price.	Cash Price.
900	¼ pt.	\$0.75	\$0.45
901	1 pt.	1.25	.75

GOODRICH PATCHING CEMENT.



903

For general patching purposes, Goodrich Patching Cements have no equal. Composed of heavy, pure gum stock, which requires less time to dry than any other cement. A first-class temporary repair for the road.

No.	Quantity.	Regular Price.	Cash Price.
903	¾ x 4 in. tube	\$0.10	\$0.05
904	¼ pt. can	.20	.15
905	½ pt. can	.35	.25
906	1 pt. can	.50	.40
907	1 pt. can	.90	.70

CONGO TIRE DOCTOR KIT



916

To satisfy the demand for an outfit which contains a combination for repairing both tires and tubes, we have made up our Tire Doctor Kit.

It consists of Pluto for the cold vulcanizing process for patching inner tubes and Vulco-Nu-Tread outfit for filling in cuts in casings.

With this outfit any kind of repair can be made. It does away with big repair bills and the exasperating delays which always accompany them. You can do your own repairing. There is no need of a repair man.

Kit consists of 4 oz. can of Vulcanoid, 6 oz. tube of Nu-Tread, 4 oz. bottle of Hazenoid, emery cloth, two brushes, and three extra rubber buttons. All packed in neat wooden box with full directions.

No. 916. Regular Price, \$1.50. Cash Price, 95c.

HALF AND HALF CEMENT



3255

Half and Half is made for the automobile trade, being especially adapted to repair casings and tubes. We guarantee it to hold fast if directions are followed. No amount of heat or friction will loosen patches applied with the cement. Outfit consists of ¼ pt. cement, ¼ pt. cold acid cure, brushes and emery paper.

No. 3255. Reg. Price, \$1.00. Cash Price, 80c.

CONGO RUBBER TREAD PLASTIC RUBBER.



2184

Rubber-Tread is a high-grade rubber compound in a plastic form for filling in cuts and digouts in casings. It is easily applied with the fingers in a manner similar to putty and it dries to a compound identical in appearance to the tire. It preserves your shoe by preventing sand pockets and blisters, which are the forerunners of blowouts, and a prevention of these means smaller tire bills and considerably less trouble.

No. 2183. Small cans. Reg. price 50c; cash price 35c.

No. 2184. Large cans. Reg. price \$1.00; cash price, 69c.

CONGO STICKFAST RUBBER CEMENT.

Nothing Better Made.



2179

This is the only preparation on the market that will repair a straight cut or gash in a casing. Stickfast will permanently unite the two rubber surfaces which the straight cut leaves. Stickfast is also the best cement made to use in putting patches on inner tubes. Outfit complete with emery cloth and special brush.

No. 2179. ¼-pint outfit. Reg. price 75c; cash price 59c.

GOODRICH VULCANIZING CEMENT.

Also good for patching, and can be used for vulcanizing with any make of acid cure solution.

No.	Quantity.	Regular Price.	Cash Price.
908	¼ pt. cans	\$0.25	\$0.20
909	½ pt. cans	.50	.35
910	1 pt. cans	.75	.65

REMEMBER WE PREPAY TRANSPORTATION CHARGES—SEE INSIDE FRONT COVER.

RUBBER PATCHES FOR INNER TUBES



872

These patches are made of best quality pure gum and are especially designed for repairing automobile inner tubes. Extra heavy, moulded with tapered edges.

No.	Size.	Cash Price.
872	1 1/4 Round dozen.....	18c
873	2 x 1 1/4 dozen.....	28c
874	2 3/4 x 2 3/4 dozen.....	58c
875	3 3/4 x 2 1/2 dozen.....	72c
876	5 1/2 x 2 3/4 dozen.....	98c

No. 877. Special offer one dozen Assorted Patches of above size, packed in neat box. Cash Price, 45c.

CONTINENTAL READY TO USE NO CEMENT PATCH



878

Just what you have been waiting for—a rubber patch that requires no cement and no acid. Punctures can be repaired in 5 minutes. These patches are specially made and prepared of the best quality Para rubber. They are not affected by heat of tire which makes them more secure, the heating having a tendency to vulcanize the special preparation on the patch. They will not curl up at the edges or work loose.

No.	Size.	Cash Price.
878	1 1/4 Round dozen.....	39c
878A	2 x 1 1/4 dozen.....	59c
878B	2 3/4 x 2 3/4 dozen.....	79c
878C	3 3/4 x 2 1/2 dozen.....	99c

No. 878D. Special offer. Eight of above patches, assorted sizes. Packed in neat box. Per Box, Cash Price, 49c.

No. 678E. One box of eight assorted smaller sizes. Cash Price, 35c.

FRICITION CLOTH



Extra heavy special fabric for lining and reinforcing casings. One side proofed, to make it adhesive to the lining of shoe. Can also be used for lining rim, to prevent tube from cprodding.

In rolls, 6 in. wide, 30 in. long.

No. 890. Regular Price, \$1.25. Cash Price, 65c.

RUBBER ROUGHENER



882

Just the thing to roughen up the parts that want to be prepared before applying cement. No. 822. Roughener. Cash Price, 15c.

TUBE REPAIR CLAMP.



883

Made of hardwood, felt lined. Clamps on tube after cement is applied and conforms to shape of patch. Very handy device and invaluable to those wishing to make permanent repair.

No. 883. Regular Price, 75c. Cash Price, 50c.

PATCHING RUBBER FOR INNER TUBES.



884

Extra heavy vulcanized stock, suitable for repairing inner tubes, made from fine Para stock. Put up in two size packages.

Rolls are 6 in. wide. No. 884. Weight, 1/2 lb. Regular Price, \$1.50. Cash Price, \$1.10.

No. 885. Weight, 1 lb. Regular Price, \$3.00. Cash Price, \$2.00.

M. & M. TOURIST KIT.

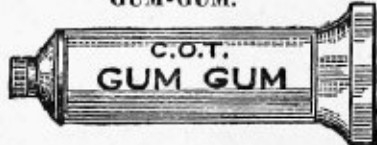


897

A handy outfit; put up especially for tourists and can be carried in very small space. It consists of 1/4 pt. each M. & M. cement and acid cure solution, 1 piece of emery cloth and 2 brushes for applying. Neatly packed in wooden box.

No. 897. Regular Price, \$1.00. Cash Price, 59c.

GUM-GUM.



902

Gum-Gum is for filling up digouts and cuts in casings which prevents sand and moisture from injuring fabric. Put up in 4 oz. tubes.

No. 902. Gum-Gum, 1 1/4 x 5 in. tube. List Price, 50c. Cash Price, 30c.

DOUBLE CONCENTRATED EXTRA HEAVY CEMENT FOR PATCHING TUBES



913

Size, 1 1/4 x 5 in. tube, holding 3 oz. No. 913. Regular Price, 25c. Cash Price, 15c.

FAMOUS M. & M. CEMENT AND ACIDS.



891

With this combination of cement and acid it is possible to repair inner tubes, outer casings, or any article made of rubber, in a permanent manner.

The cement is used the ordinary way, the same as any other kind; then the acid is applied which cures the patch to the tube or casing, making the job as good as can be done with any kind of vulcanizer.

M. & M. Cement—Can be used with or without acid.

No.	Quantity.	Regular Price.	Cash Price.
891	1/2 pt.	\$0.50	\$0.29
892	1 pt.	.75	.48
893	1 qt.	1.50	.90

M. & M. Acid—Must be used in connection with cement only.

No.	Quantity.	Regular Price.	Cash Price.
894	1/2 pt.	\$0.50	\$0.29
895	1 pt.	.75	.48
896	1 qt.	1.50	.90

UNCURED GUM.



886

Extra heavy uncured stock, for use with any make steam, electric and gasoline vulcanizer. Put up in two size packages.

For Casings.

No.	Weight.	Regular Price.	Cash Price.
886	1/2 lb.	\$1.50	\$0.75
887	1 lb.	3.00	1.35

For Inner Tubes.

No.	Weight.	Regular Price.	Cash Price.
888	1/2 lb.	\$2.00	\$1.00
889	1 lb.	4.00	1.85

CONGO NU-TREAD



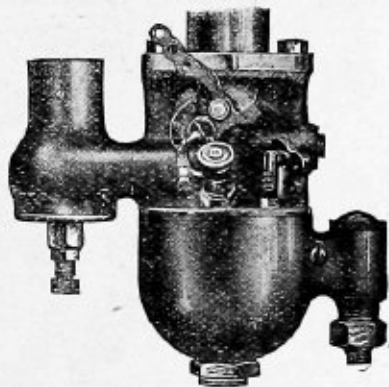
Nu-Tread is a rubber compound in a plastic form. It fills a cut perfectly, with very little shrinkage, and, when dry, forms a compound identical with the tread of the tire. It has perfect adhesive properties, is not loosened by wear, and is of inestimable value in repairing small cuts, which, left unattended, would in time assume a serious character. Put up in collapsible tubes.

No. 899. Size 1 1/4 x 5 in. Regular Price, 75c. Cash Price, 30c.

(Money refunded on above if it does not do just as we say.)

899

SCHEBLER MODEL "F", 1908.

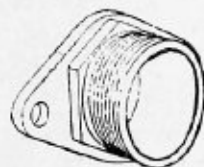


1583

This model slightly differs from the other two styles, but in general it embodies all the principles enclosed in them. The throttle is water-jacketed, with a butterfly valve in place of disk type used on the other models. Principally adapted to four cylinder cars.

No.	Size.	Regular Price.	Cash Price.
1583	1 in.	\$18.00	\$10.95
1584	1 1/4 in.	20.00	11.49
1585	1 1/2 in.	25.00	13.49

ENGINE CONNECTIONS.



1620

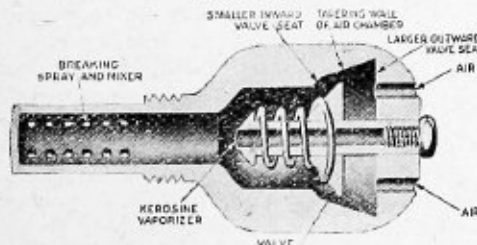
Special connections are necessary in many cases.

We can furnish several types of flanges to meet requirements.

No.	1620	1621	1622	1623	1624	1625	1626
Size	1/4 in.	1 in.	1 1/4 in.	1 1/2 in.	2 in.	1 1/4 x 1 1/2 in.	1 1/2 x 1 1/2 in.
Price	80c.	80c.	80c.	\$1.20	\$1.50	\$1.20	\$1.50

Prices are for male, female horizontal or female vertical.

SPEEDO.

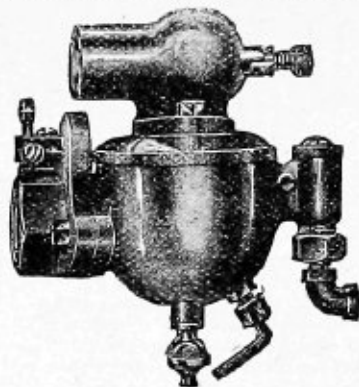


3256

Speedo is a wonderful mechanism, attached on your intake manifold. It breaks up under spray, each particle of gas after leaving the carburetor. This makes more air necessary and Speedo injects additional air perfectly and automatically, according to speed, giving highest perfection of mixture with lowest amount of fuel. Simple principle—perfect mechanism—positive results. Attached in five minutes. State horsepower of engine when ordering.

No. 3265. Cash Price, \$3.50.

SCHEBLER MODEL "D" STANDARD.



1575

The Schebler Carburetor has attained widespread popularity among manufacturers, dealers and users of automobiles, launches and speed boats. Its rapid advance is due entirely to its high efficiency. It is made on thorough practical lines and is so constructed that it cannot be easily damaged. All parts being interchangeable, it is a very easy matter to obtain replacement in almost every place in this country. We constantly carry in stock all sizes of the following models and can make delivery upon demand.

Model "D" is the standard original Schebler carburetor and will fit any automobile or marine engine made. The connections are interchangeable, making it possible to use this carburetor as top or side outlet. Good for any car.

No.	Size.	Regular Price.	Cash Price.
1575	1 in.	\$16.00	\$7.90
1576	1 1/4 in.	17.00	8.25
1577	1 1/2 in.	22.00	13.50

PREST-O-LITE TANKS.

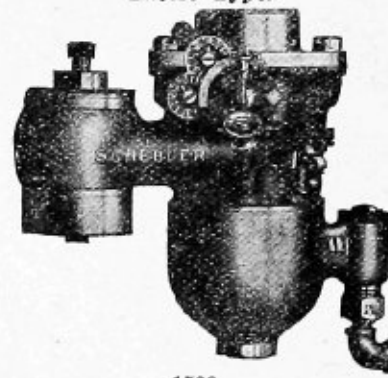


2490

Prices, sizes and capacities of Prest-O-Lite Gas Tanks, complete with bands, key and connections:

"E"—Contains 30 cubic feet of gas, 16 in. long, 6 in. in diameter. Recharge...\$1.50
Using two 1/4-ft. burners 60 hrs. lighting.
Using two 1/2-ft. burners 30 hrs. lighting.
No. 2489. Cash Price.....\$15.00
"B"—Contains 40 cubic feet of gas, 20 in. long, 6 in. in diameter. Recharge...\$2.00
Using two 1/2-ft. burners 40 hrs. lighting.
Using two 3/4-ft. burners 32 hrs. lighting.
Using two 1-ft. burners 26 hrs. lighting.
No. 2490. Cash Price.....\$20.00

SCHEBLER MODEL "L" Latest Type.



1588

The Model "L" Carburetor has several new features different from the Model "F," namely: The air valve is interchangeable so that air can be drawn from either top or bottom.

The leather air valve is backed up by a brass plate, preventing any danger of buckling. It also has a long bearing or sleeve, and travels on a rod supported at both ends, insuring perfect alignment.

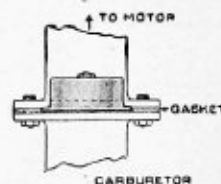
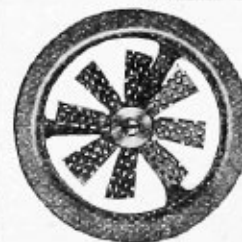
The amount of fuel entering the mixing chamber is controlled automatically by means of a needle valve, directly connected to a roller operating on a cam spring, adjustable to different angles by means of the cam spring adjusters.

The adjustment for low speed is made directly by the needle, while that for intermediate and high speed is obtained by varying the cam spring. This is an improvement over the Model "F," as needles of different taper are not required.

This carburetor is provided with a water jacket around throttle, and this should, in every case, be connected up.

No.	Size.	Regular Price.	Cash Price.
1588	1 in.	\$18.00	\$10.95
1589	1 1/4 in.	20.00	11.49
1590	1 1/2 in.	25.00	13.49

GYREX THE MIXER.



2447

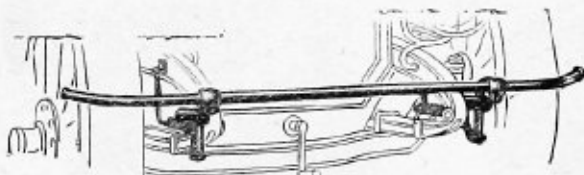
The Gyrex does what the best carburetors cannot do. It thoroughly mixes the gasoline and air in the intake pipe so that all the energy in the fuel is converted into power. It delivers to the cylinders a perfect mixture that produces even explosions, which means not only economy of fuel and more power, but a saving in upkeep and tire expense. No cutting or fitting of intake pipe or change in position of carburetor is necessary. Can be inserted in intake pipe in 5 minutes. Made in 1-16 inch sizes from 1/4 to 2 inches.

No. 2447. Cash Price, \$3.00.

When ordering be sure to specify exact inside measurements of pipe it is wanted for

REMEMBER WE PREPAY TRANSPORTATION CHARGES—SEE INSIDE FRONT COVER.

SWIVELACTION BOLT-ON BUMPER



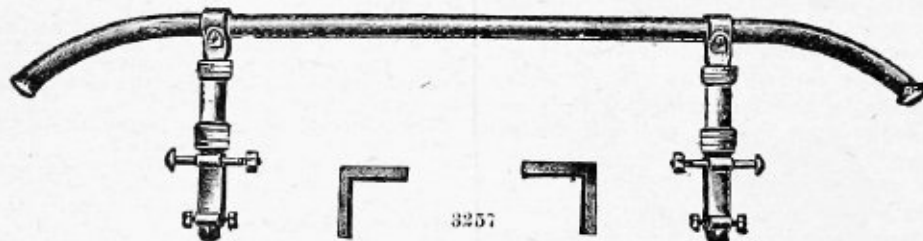
1573

protection from a piece of tubing mounted on a common spring, which some concerns have misnamed a bumper.

The Swivelaction Bumper is just what its name implies. It is constructed with two swivel joints. Thus, if the car comes into violent contact with an object at either end of the bumper, the flexible swivels provide the same resiliency as though the force of the collision bore on the springs direct. No other bumper on the market offers this advantage.

No. 1573 Black finish. Regular Price, \$12.50. Cash Price, \$9.00.
No. 1574 Brass finish. Regular Price, \$15.00. Cash Price, \$11.25.

STANDARD BRASS BUMPERS

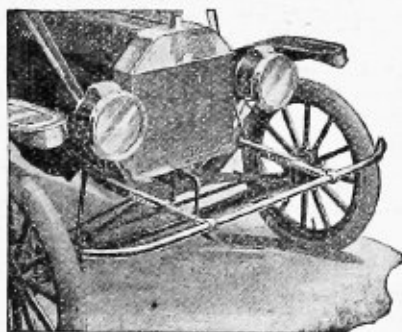


3257

Made of heavy brass seamless tubing, iron lined and reinforced, highly polished solid brass square castings. Spring entirely covered with brass tubing, and is powerful enough to resist any shock.

No. 3257 Regular Price, \$7.50. Cash Price, \$3.95.

SPECIAL BUMPER FOR FORD CARS



3258

This bumper is especially designed for Ford cars, which have no projecting frame. The side brackets are supported by two bars of steel, which are bolted firmly to the frame. The block bar is made of steel tubing, very stiff but light. The brass or nickel bar is made of strong steel tubing covered with a solid brass tube. The bar and eye-bolt are furnished in either nickel, brass or black; however, in all cases the supporting arms and other brackets are furnished in hard rubber black enamel.

No. 3258. Nickel. Reg. Price, \$9.00. Cash Price, \$7.50.
No. 3259. Brass. Reg. Price, \$8.00. Cash Price, \$6.00.
No. 3260. Black. Reg. Price, \$7.00. Cash Price, \$5.25.

DETROIT SPRING BUMPER. (Channel-Bar Type.)

3161



The brackets are very strong and adjustable so as to fit any car and can be attached quickly. The shock-absorbing spring is made of very stiff oil-tempered wire, and is covered with a sleeve. The bar is a two-inch steel channel bar. Black frame castings furnished with all bumpers.

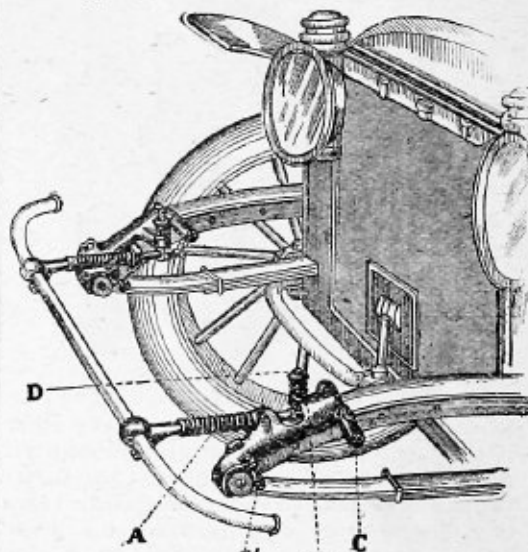
No.	Style.	Regular Price.	Cash Price.
3261	Brass	\$11.50	\$8.75
3262	Nickel	12.00	9.00
3263	Black	10.20	7.75

THE "HYDRAULIC" ALL BRASS FOLDING SHIELD.



2065

WILCO IMPROVED BUMPER



2308

It possesses the following features:

1. It has a double action: upon coming in contact with any object the "thrust" or "shock" is absorbed not only through the action of the main spiral spring A, but also by the perpendicular spring B. The shock is thus reduced to a minimum as far as the frame is concerned.
2. The Wilco is attached to any car without drilling holes and without taking out any spring bolts. It is done simply by the channel spring supports C, C'.
3. By a simple adjustment of the bolt D the Wilco can be made to fit any car, irrespective of the curve of the channel.
4. Anybody can attach the Wilco in actual FIVE MINUTES by the use of a wrench without having in any way to effect a change in the car either by the removal of bolts or by drilling holes.

No. 2308. Regular Price, \$12.00. Cash Price, \$7.50.

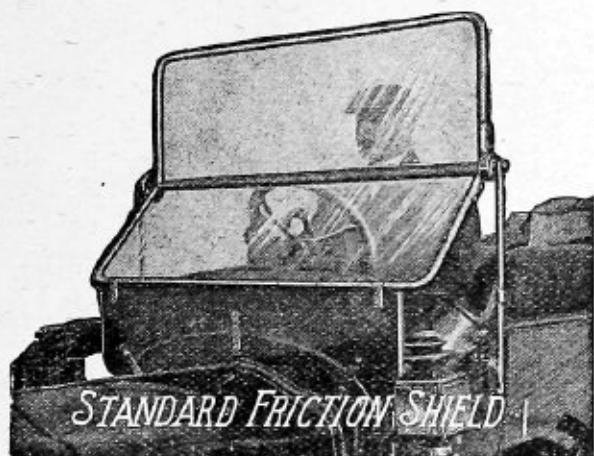
The "Hydraulic" Shield is the only folding dust and wind shield that can be instantly raised or lowered with one finger while the car is running at full speed. Every car owner who has ridden behind it will not be without it. Even friends asked to take a ride hesitate to accept the invitation if the car is not fitted with a wind shield. Even on a sultry day, when you think that you do not need a shield, a sudden wind, a shower or a cloud of dust caused by a rapidly passing or approaching car changes the order of things, and then the wind or dust shield is wanted. The "Hydraulic" action does the rest.

You know the difference between a hydraulic door check and an ordinary coil spring on your big glass office door. The hydraulic shuts the door without slam and without danger to glass.

The entire frame and fittings are of brass, fitting in base board 6, 9 or 12 in. deep. Made in three sizes.

No.	Size.	List Price.	Cash Price.
2065	36 in.	\$25.00	\$12.50
2066	41 in.	30.00	14.00
2067	44 in.	32.50	15.00

1912 Model Wind Shields



2550.

CLEAR VISION ZIG-ZAG.

	Reg. Price.	Cash Price.
36 in.....	\$27.50	\$17.50
41 in.....	30.00	19.50
44 in.....	32.50	21.50

HINGE—Friction supplemented by pawls which lock the shield in four positions. The tension of the pawls and friction is independent. While the pawls are sufficient to hold the top half of the shield in position, by tightening the friction surfaces the tension can be regulated to suit individual requirements. The pawls and ratchets are case-hardened steel. The cupped spring washers maintain an equal pressure on the fibre friction washers, thus insuring uniform and smooth action of the hinge. The interior of the hinge is thoroughly lubricated, and as the hinge is

The Standard Friction Wind Shield

No Rattling
No Flopping
The Shield with
the Positive Lock.
Will Last as Long
as Your Car.



2424.

RAIN VISION VERTICAL.

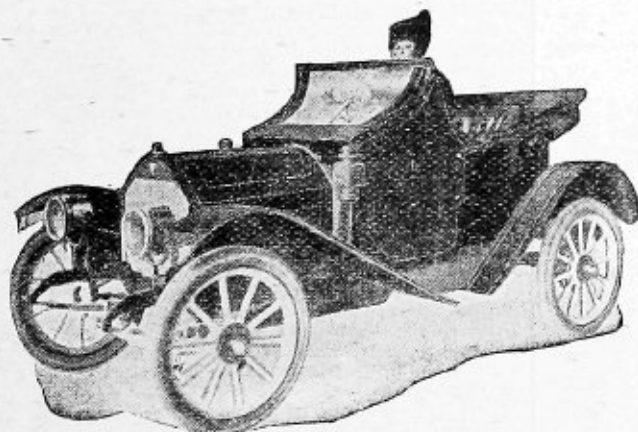
	Reg. Price.	Cash Price.
36 in.....	\$32.50	\$20.50
41 in.....	35.00	22.50
44 in.....	37.50	25.00

SPECIFICATIONS.

absolutely air-tight, evaporation of the lubricant is prevented and wear is practically eliminated.

FRAME—1½-gauge brass tubing. Glass, 3-16 in. imported French plate.

FITTINGS—Either African mahogany or Circassian walnut filling-in board; telescopic stay rods; brackets for attaching filling-in board to dash and wind shield to filling-in board; swivel bases for attaching stay rods to frame.



3264

THE DEFLECTOR SHIELD.

Six or eight years ago an enthusiastic motorist and observing gentleman, Mr. H. H. White, of Cambridge, Mass., constructed for his own use a curved, non-glass shield.

The Deflector is the result of our development of Mr. White's original idea and is offered as the best shield yet produced.

Deflector Shields are made of Pantasote and similar materials with windows of tough, transparent fibre, mounted on a strong steel frame. The curved form deflects air currents strongly up and over the car, together with dust, insects and to a large extent, rain also. The peculiar and pleasing curve of Deflectors has been developed in its present highly efficient form by many experiments.

They are cool in summer as air may be admitted under the shield while still protecting the driver's eyes, and with side curtains attached cars may be used with warmth and comfort in the coldest weather.

Experience proves that the new Deflectors are more easily attached to cars than glass shields. They add to the appearance of the car, are strong and in case of accident, contrary to glass shields, act to safeguard rather than injure. Little attention is required and after extended use the wiping of the fibre with damp chamols and the application of a light dressing to the leather is all that is necessary.

SPECIFICATIONS:

Side Rods: Brass covered, with swivel fitting and set screw for adjustment.

Curtains: Of generous size for fitting any car. Snap fasteners attached.

All shields have side curtain attachments.

Accessories: Curtain fasteners, lamp bracket straps, screws and eyelets.

Width: Top 46 inches. Bottom 30 to 36 inches.

Length: 23 to 27 inches on the curve.

Material: Steel frame covered with imitation leather or pantasote.

Window: Heavy transparent fibre, 3/4 inches wide.

Ventilator: Opens for admission of air.

Apron: Detachable for easy fitting.

Dash Supports: Heavy malleable brass, drilled for screws.

NET CASH PRICES EXPRESS PREPAID.

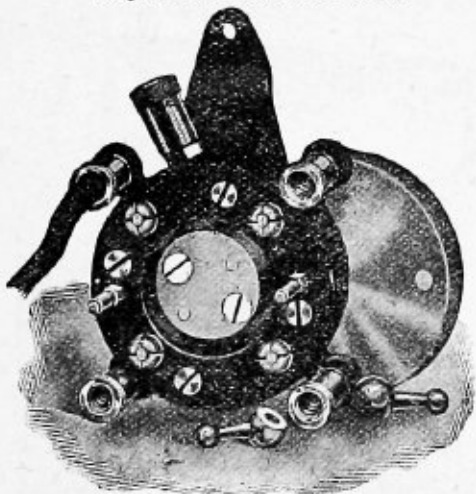
When ordering state make, year and model of your car.

No. 3264. Imitation leather without curtains	\$22.50
No. 3265. Imitation leather with curtains	27.00

No. 3266. Genuine pantasote without curtains	\$27.00
No. 3267. Genuine pantasote with curtains	31.50

REMEMBER WE PREPAY TRANSPORTATION CHARGES—SEE INSIDE FRONT COVER.

"HERZ" IMPROVED TIMER. Improved Standard Model.



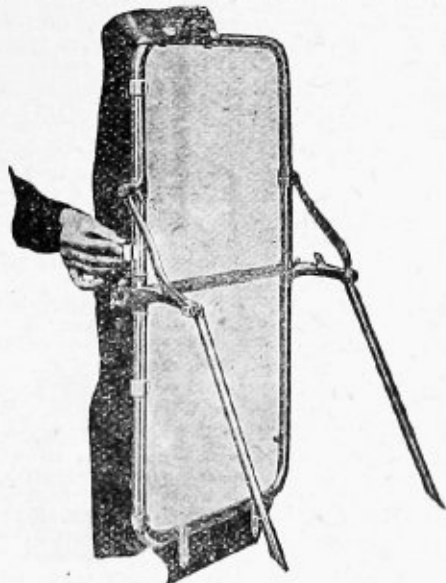
1466

The "Herz" Timer works with any coil. Self-adjustable bearings and absolutely dust-proof, assuring the greatest amount of service.

The instrument is perfectly constructed through and through, and each part is of the very finest material.

No.		Regular Price.	Cash Price.
1466	One cylinder.....	\$6.50	\$3.75
1467	Two cylinders.....	7.00	4.50
1468	Three cylinders.....	7.50	4.75
1469	Four cylinders.....	8.00	5.25
1470	Six cylinders.....	10.00	6.00

THE SWAN HANDY CURTAIN CLIP.

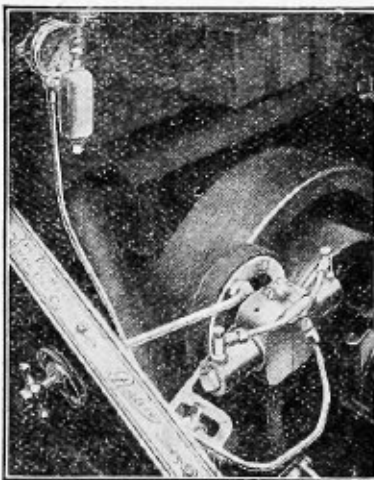


1755A

Since the solid brass wind shields have been presented to the trade, every one handling the same has put up a great cry for some simple device for attaching the curtains to the shields—something that could be removed entirely from the shields when the curtains were not in use so that the metal tubing could be easily polished. This device entirely eliminates the necessity of attaching fasteners by soldering or tapping into frame and inserting screws.

No. 1755A. Made of spring brass. Cash Price, each, 8c. Per doz., 75c.

THE BASTIAN TIRE PUMP.



3268

This pump is designed to run by friction against fly wheel or can be geared to shaft. The former method is recommended where possible, as it allows the pump to run at a high speed with a slow speed of engine. The pump is put in operation by means of a brass thumb screw on side of car. A 12 ft. pressure hose is attached to a gauge on the dash which registers the pressure in tire. It is without doubt the best pump of this type on the market.

No. 3268. Regular Price, \$25.00. Cash Price, \$19.50.

GOOD POINTS OF THE BASTIAN TIRE PUMP.

Saves time and labor.
Your engine does the work.
Tires inflated in one and a half minutes.
Inflated always to proper pressure.
Is small and compact.
Impossible to pump oil in tires.
No packing to replace.
Splash system of lubrication.
Seldom needs oiling or attention.
Working parts encased. (Dust proof.)
Can be applied by any mechanic.

Guaranteed for one year.

"NORWOOD" AUTO TRUCK.



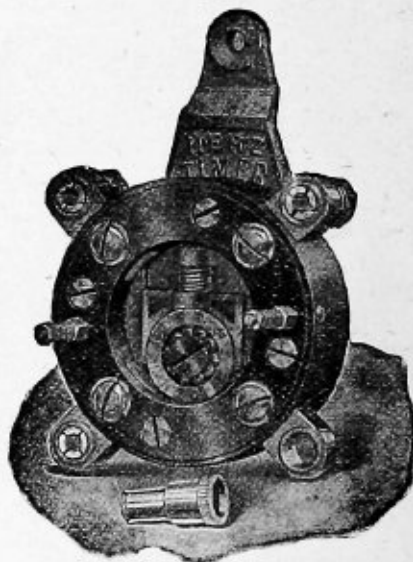
1465

The device consists of a pair of trucks, each so arranged that the wheels fit into a steel concave. Can also be used for moving heavy castings, engines, etc. You can take them to your car and do not have to take the car to them. You can use this device anywhere that you have room to turn your car.

No. 1465. (Model 1.) For runabouts and light touring cars. Regular Price, \$16.00. Cash Price, per pair, \$9.50.

No. 1465A. (Model 2.) Regular Price \$20.00. This size for heavy cars ranging from 2,500 pounds up. Cash Price, \$12.50.

HERZ TIMER. Roller Type, With Double Ballbearings. (Patent applied for.)



1471

Dimensions.

Diameter of insulation.....	2 3/4 in.
Across contacts, over all.....	3 1/2 in.
Length of shaft.....	2 3/4 in.
Diameter of roller.....	13/16 in.

In this instrument the contact is made by a roller rolling over the ground and polished surfaces of the contacts.

The Construction.

The Herz-Roller Timer consists of three main parts: The metalbase, the revolving center and the insulation holding the contacts.

The metalbase (1) contains imbedded and fastened, two steel cups, hardened and ground and held rigid in the base.

The revolving center has a steel sleeve with two hardened steel cones, revolving between the two before mentioned steel cups, fastened in the base and running on two strings of imported English balls, contained in ball retainers.

The revolving center is therefore held between two ballbearings.

To the upper end of the steel sleeve fastens the parallel side with the roller (4). The roller is an annular bearing, made of steel and fastened to the sliding piece (3) by the screw (5). The sliding member (3) is pressed outward by a spring (11).

The insulation is made of hard vulcan fibre, and supports, tightly enclosed, the tool-steel contacts over which the roller passes. The surface is turned and ground to caliper.

Points of Superiority.

Double ballbearing for the revolving part; large roller running on steel balls; small outside dimensions (diam., 2 3/4); spring connections throughout.

This tried-out device has been placed on the market after long trials under the most adverse conditions, and we can safely recommend the same as the best roller-timer made.

No.		Regular Price.	Cash Price.
1471	One cylinder.....	\$6.50	\$4.00
1472	Two cylinders.....	7.00	4.75
1473	Three cylinders.....	7.50	5.00
1474	Four cylinders.....	8.00	5.50
1475	Six cylinders.....	10.00	6.50

Above timer furnished for any make of car at the above prices.

**SOAPSTONE.**

High grade French chalk for inner tubes. Put up in tin cans with sifting top, convenient to use and keep soapstone from spilling out.

No. 717. One pound can. List Price, 25c. Cash Price, 8c.

INNER TUBE BAGS.

Extra fine quality enameled duck, strong, durable and absolutely water-proof. Each size is large enough to carry any size tube.

No. 742. Holds one tube. Regular Price, 75c. Cash Price, 20c.

No. 743. Holds two tubes. Regular Price, \$1.00. Cash Price, 35c.

No. 744. Holds four tubes. Reg. Price, \$2.00. Cash Price, \$1.00.



742

RUBBER WASH APRON.

For wearing while washing the car or cleaning up of any kind. Made of melodin rubbered cloth, therefore water-proof.

Protects your clothes and just the thing for the man who cleans his own car.

No. 1540. Regular Price, \$1.50. Cash Price, 95c.



1540

HILL'S REVOLVING SEAT.

Seats are round, 13 in. diameter, with curved folding back 17 in. high, springs in cushion; has round iron base to attach to floor, when not required can be removed easily. If floor of car is thin, stiffen same by attaching cleat 20x4x 1/2 in. on under side of floor.

No. 1550. Trimmed in genuine M. B. leather, black or red, with folding back. Cash Price, each, \$8.25.

No. 1551. Best artificial leather trimmed, black or red, folding back. Cash Price, each,



1550

\$6.25.

BEST QUALITY TIRE TAPE.

There is no better tape made. No automobilist should be without a roll of this tape. Good for insulating purposes, binding up leaky pipes, etc.

No. 898. 1/2 lb. roll, 3/4 in. wide. Regular Price, 30c. Cash Price, 15c.



898

HILL'S REVOLVING SEAT.

Seat is round, 13 in. diameter, spring cushion back 17 in. high, trimmed in M. B. leather, black, red or dark green.

Seat revolves and can be folded up close to side of body by a simple device. This consists of an iron under the seat with two socket holes at right angles, to rest on pivot when seat is folded or open.

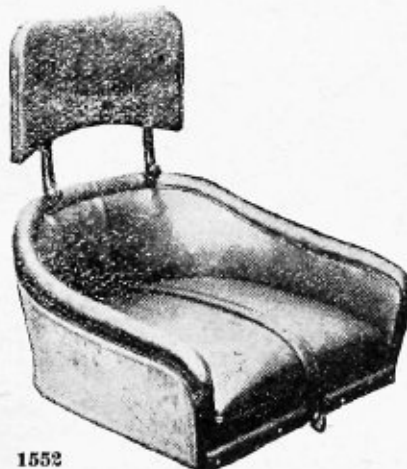
The attaching irons fasten to door post and sill of body, thus overcoming the heavy strain on door post.

No. 1548. With attaching irons. Cash Price, each, \$14.00.

No. 1549. With cushion trimmed plain. Cash Price, each, \$12.00.



1548

HILL'S RUMBLE SEAT. No. 9.

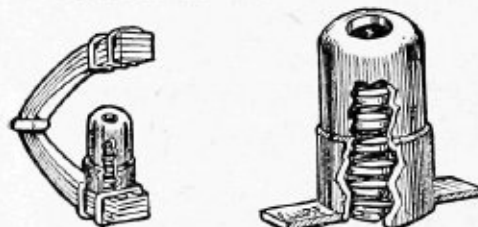
1552

Seat is made of wood, round corners; size on bottom, 17 in. wide, 16 in. deep; back 9 in. high, sides, 6 1/4 in.; height from bottom to top of lazy back, 20 in. Trimmed in No. 1 M. B. leather.

No. 1552. With folding lazy back. Cash Price, \$22.50.

No. 1553. Without lazy back. Cash Price, \$13.50.

Painting seats, add \$5.00.

ECLIPSE SPRING BUMPERS.

3243

Their function is to relieve and prevent strains on the springs when the car is heavily loaded. Eclipse Bumpers are superior to ordinary rubber bumpers, because the coil spring and telescopic housing offer greater resiliency.

Their cost is so small and their utility so great that no motorist should risk the effect of severe bumps and shocks on expensive car springs.

No. 3243. For Light Weight Cars. Reg. Price, \$3.00. Cash Price, \$1.15.

No. 3244. For Medium Weight Cars. Reg. Price, \$3.00. Cash Price, \$1.15.

No. 3245. For Heavy Weight Cars. Reg. Price, \$3.00. Cash Price, \$1.15.

PREMIER JOINT PROTECTORS.

Made of heavy enameled duck, large enough to be filled with grease to protect the parts from rust and at the same time lubricate them. Easily adjusted and need no attention for months after once filled and attached.



3269

KNUCKLE BOOT

No. 3269. Enameled Duck, large. Reg. Price, 42c. Cash Price, 20c.

No. 3270. Enameled Duck, small. Reg. Price, 42c. Cash Price, 20c.

No. 3271. Leather, large. Reg. Price, \$1.04. Cash Price, 55c.

No. 3272. Leather, small. Reg. Price, \$1.04. Cash Price, 49c.

END THRUST BOOT

No. 3273. Enameled Duck, large. Reg. Price, 48c. Cash Price, 25c.

No. 3274. Enameled Duck, small. Reg. Price, 48c. Cash Price, 20c.

No. 3275. Leather, large. Reg. Price, \$1.14. Cash Price, 65c.

No. 3276. Leather, small. Reg. Price, \$1.14. Cash Price, 59c.

CARDAN JOINT BOOT

No. 3277. Enameled Duck, large. Reg. Price, 52c. Cash Price, 25c.

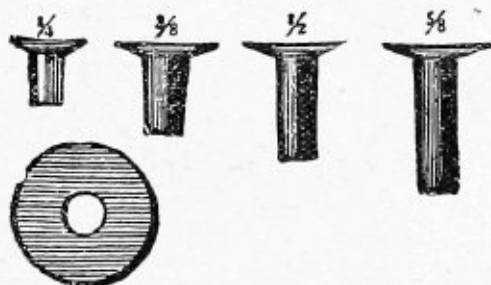
No. 3278. Enameled Duck, small. Reg. Price, 52c. Cash Price, 20c.

No. 3279. Leather, large. Reg. Price, \$1.40. Cash Price, 80c.

No. 3280. Leather, small. Reg. Price, \$1.40. Cash Price, 75c.

We ship on approval any article that you may select from this catalogue, and if for any reason, after you have examined the goods, they are not entirely satisfactory, you may return them at our expense.

**GENUINE COPPER BELT RIVETS AND
BURRS. ALL THE BEST SIZES.
UNIFORM LENGTHS.**



2302

Sold in 1/2-lb. Boxes Only.

No.	Size.	Cash Price, Box.
2302	1/4 in.	25c
2303	3/8 in.	25c
2304	1/2 in.	25c
2305	3/4 in.	25c

**H. J. BROWN & CO. BEST ENGLISH
STEEL RIVET PUNCHES. EXTRA FIN-
ISHED. FIRST QUALITY.**



2306

For any of the above size Rivets:

No. 2306. List Price, 20c. Cash Price, 15c.
State size wanted.

**UNION KNIFE WORKS' EXTRA FIN-
ISHED BEST STEEL SCRAPING
KNIVES.**



2307

Beech Handle. Blade Running Through
the Handle.

No. 2 Flexible Steel Blade.

Useful for cleaning dirt, Tar and oily
muck which will gather around the engine
and other parts of your car.No. 2307. Regular Price, 25c. Cash Price,
15c.

CHAMOIS RUB BRUSH.

CHAMOIS IN PRACTICAL, ECONOMICAL SHAPE
FOR WASHING, CLEANING & POLISHING
FLEXIBLE BACK—6 x 5 inches.



1199

Composed of fine grade French oil stained
chamois remnants, sewed up on one piece of
cloth that acts as a brush. Fits the hand
and very handy for use on varnished or
polished surfaces.

No. 1199. List Price, 25c. Cash Price, 17c.

BLUE RIBBON METAL POLISH.



3281

The original cream
metal polish—an emul-
sion. Does not settle;
requires no shaking
up; leaves no sedi-
ment in the crevices.
It removes the tar-
nish—not the metal.
Regarded by large
users and dealers
everywhere as the
ideal polish for all-
around use.

No. 3281. 1 Pt.
Regular Price, 40c.

Cash Price, 22c.

No. 3282. 1 Qt.
Regular Price, 75c.

Cash Price, 39c.

No. 3283. 1/2-Gal.
Regular Price, \$1.25.

Cash Price, 60c.

No. 3284. 1 Gal.
Regular Price, \$2.00.

Cash Price, \$1.00.

STAR BODY CLEANER.

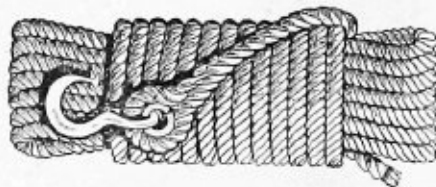


3285

Will keep your car in first-
class condition without in-
jury to the varnish. Tested
thoroughly by U. S. Govt.
and now used by the Army
and Navy Depts. Can be
used on auto body, leather
cushions, glass and brass
work.

No. 3285. 1 Pt. Cash Price,
45c.No. 3286. 1 Qt. Cash Price,
85c.

MOTOROPE



1200

Every motor car should be equipped with
a piece of good rope for towing, binding rear
wheel to prevent skidding, securing trunks
and packages, and for other purposes sug-
gested by occasion.

In emergency, rope is the first thing re-
quired. It is indispensable for touring or
rough cross-country traveling.

Moto Rope is made of the finest quality of
Manila hemp, especially for motorists, and
is greatly superior in appearance, strength
and wear to any hardware store rope.
Equipped with galvanized hook for quick
and easy attaching.

No. 1200. 30 ft., 1/2 in. diameter, for light
cars. Cash Price, 89c.No. 1201. 40 ft., 3/4 in. diameter, for me-
dium weight and heavy cars. Cash Price,
\$1.69.

**PATENT REMOVABLE COVER FOR
STEERING WHEELS.**



1564

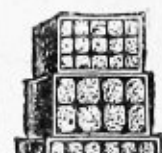
This cut represents a useful and handsome
device for motorists.

It is designed for the protection of the
hands while steering the car.

It prevents all chafing of the hands and
protects from the cold surface of the steer-
ing wheel in winter, also prevents hands
slipping from perspiration in hot weather
and affords the driver a better grip on the
steering wheel, and adds to his or her ease
and comfort. It gives the wheel a finished
appearance. No car is complete without it.
It is made of the very finest grade of soft
pliable rubber in both black and tan. It
laces tightly around the steering wheel
which improves its appearance.

No. 1564. Regular Price, \$3.50. Cash
Price, \$2.25.No. 1565. Made of rubber coated duck.
List Price, any size, \$1.50. Cash Price, 90c.No. 1566. Made of fine pebbled leather.
List Price, any size, \$2.00. Cash Price,
\$1.10.

BEST QUALITY SPONGES.



Best quality, medium
size. Especially selected,
soft and particularly
adapted for use in con-
nection with soaps, etc.

No. 1191. Small size. Reg-
ular Price, \$1.00. Cash
Price, 50c.No. 1191A. Medium size.
Cash Price, 75c.

1191

No. 1191B. Large size. Cash Price, \$1.00.

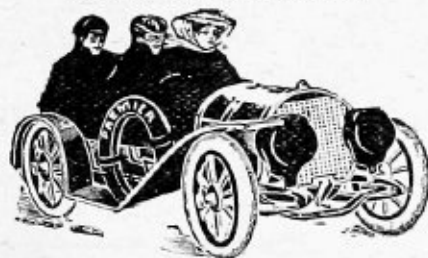
**"SOLARINE" METAL
POLISH.**



1174

A very satisfactory pol-
ish for nickel, brass copper
and bronze, and especially
good for auto lamps, horns
and trimmings.

No.	Quantity.	Reg. Price.	Cash Price.
1174	—Pint	\$0.50	\$0.25
1175	—Quart	.75	.45
1176	—1/2 gallon	1.25	.65
1177	—1 gallon	2.00	1.19

RUBBER CAPE APRON.

1487

Made of the best quality melodian rubber and used principally on roadsters, runabouts and also touring cars without tops. Each apron is fitted with adjustable fastenings, both front and back, to secure it in place. The head openings are fitted with collars 3 in. high, closed up with glove fasteners, which protects the neck and face from dust, rain and wind. The opening can be closed when not in use, and the apron can also be used for a dust cover.

No.	Size.	Openings.	Regular Price.	Cash Price.
1487	Large tonneau.	7	\$20.00	\$11.50
1488	Medium tonneau.	5	17.00	9.00
1489	Small tonneau.	4	14.50	7.00
1490	Runabout.	2	10.00	5.00
1491	Rumble seat.	3	13.50	6.75

AUTO TOP DUST HOODS.

Best Quality.



1502

Made of heavy rubbered drill. Guaranteed not to crack, and is positively water proof. The object of this hood is to cover the Automobile top complete; in fact, to incase it in a sort of a water-proof bag. It is adjustable to fit different makes of tops. Elastic cord at the opening, which holds the hood close to the top and prevents dust and mud from soiling the top. It fits perfectly smooth and gives a crushed top a neat and finished appearance. It saves the top and the expense of having the top cleaned. It adds a great deal to the appearance. It has a skirt which covers up the back of the rear seat, protecting the occupants.

Made of Rubber Drill.

For Runabouts.

No.	Width of Top.	Regular Price.	Cash Price.
1502	46 in. to 52 in.	\$5.00	\$2.65
1053	54 in.	5.50	2.75
1504	56 or 58 in.	5.75	2.85

For Medium Size Touring Cars.

No.	Width of Top.	Regular Price.	Cash Price.
1505	60 in.	\$6.00	\$2.95
1506	62 in.	6.25	
1507	64 in.	6.50	
1508	66 in.	6.75	

For Large Size Touring Cars.

No.	Width of Top.	Regular Price.	Cash Price.
1509	70 in.	\$7.00	\$3.25
1510	72 in.	7.25	
1511	74 in.	7.50	
1512	76 in.	7.75	
1513	78 in.	8.00	

Made of Artificial Leather.

For Runabouts.

No.	Width of Top.	Regular Price.	Cash Price.
1514	52 in. to 46 in.	\$6.00	\$1.00
1515	54 in.	6.25	
1516	56 or 58 in.	6.50	

For Medium Size Touring Cars.

No.	Width of Top.	Regular Price.	Cash Price.
1517	60 in.	\$7.00	\$1.50
1518	62 in.	7.25	
1519	64 in.	7.50	
1520	66 or 68 in.	8.75	

For Large Size Touring Cars.

No.	Width of Top.	Regular Price.	Cash Price.
1521	70 in.	\$9.00	\$5.00
1522	72 in.	9.25	
1523	74 in.	9.50	
1524	76 in.	9.75	
1525	78 in.	10.00	

How to Measure for Top Hood.

Measure across the front bow from A to B, as per dotted line. This is the only measure necessary.



Example: If top measures 59 or 60 in., order a 60 in. hood, always the nearest largest size.

McKINNON FOLDING SEATS.For Automobiles.
Patent applied for.

1526

Strong, steel frame, japanned, oxidized or brass plated. Seat and back artificial leather. Padded. Can be compactly folded into a space 13x20x2 1/2.

No.	Size of Seat.	Height of Seat.	Finish.	Cash Price.
1526	10 1/2 x 11	16	Black japanned	\$1.75
1527	10 1/2 x 11	16	Oxidized	2.00
1527A	10 1/2 x 11	16	Brass plated	2.25

Unlike most all other folding chairs this is a thoroughly practical article and not just an ornament.

THE HARTFORD AUTO-JACK

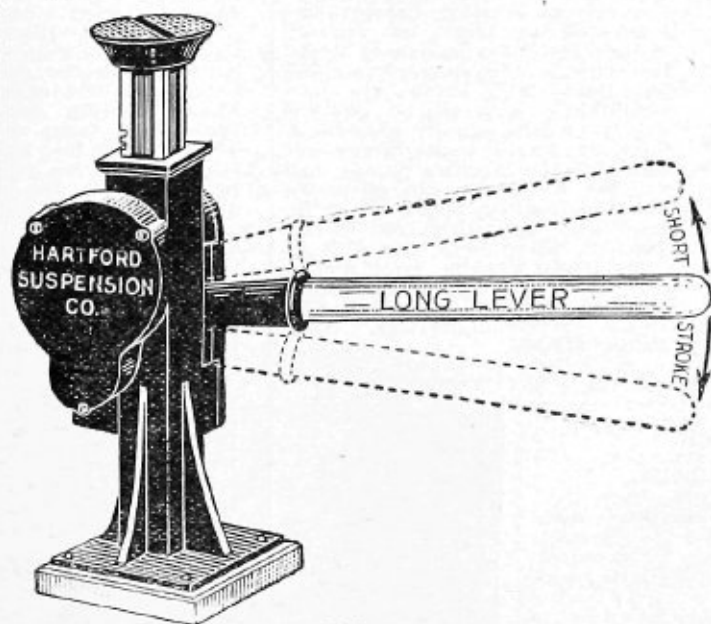
The need of something better prompted the invention of the Hartford Auto-Jack, the easiest working jack on the market.

Fifteen pounds' pressure on its handle will lift 1,000 pounds on its rack. A child can apply this pressure with little exertion.

Gears, cut from steel and hardened, ingeniously arranged, wonderfully multiply the little power applied at the handle of the Hartford Auto-Jack, insuring big results from little effort.

The jack with the long lever and short stroke. No action here like a town pump; just a little movement up and down does the work, does it so easily that it is child's play to jack up a heavy limousine car.

In design the Hartford Auto-Jack is symmetrical and compact. The actuating mechanism is housed in a casing of the toughest malleable iron, and a hard-



3287

wood base gives perfect stability when the jack is in use.

The lifting rack and gears are cut from solid steel, then case-hardened. A method of construction that makes wear practically negligible and insures a period of usefulness surpassing the life of four automobiles.

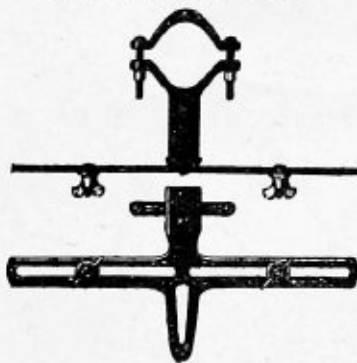
The turn of a unique reversing lever instantly makes the change from lifting to lowering, or vice versa.

Six-inch lift; normal height over all, 10 1/2 inches. Satisfaction guaranteed. Therefore, a safe purchase. No. 3287. Cash Price, \$8.00.

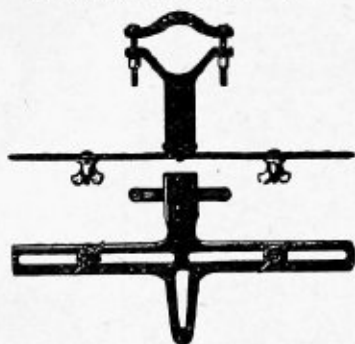
SOMETHING YOU MUST HAVE.

The Neverout
TRADE MARK**FRONT LICENSE BRACKET**

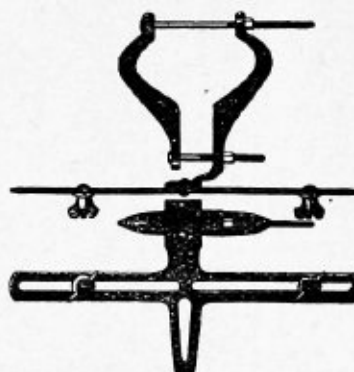
Patented in U. S. and Principal Foreign Countries. (See special literature for list of patents.)

**No. 7 Regular**—Fits water filler on the majority of cars. Attaches directly to water filler tube.**No. 2118.** Polished Brass, \$1.50.**No. 2119.** Malleable Iron Black Baked Enamel, \$1.00.**No. 2120.** Aluminum, \$1.50.*The Neverout*
TRADE MARK**FRONT LICENSE BRACKET**

Patented in U. S. and Principal Foreign Countries. (See special literature for list of patents.)

**No. 7 1/2**—Small size for Hupmobile, Ford, older models of Cadillac, and most all cars with small fillers. Attaches directly to water filler tube.**No. 2551.** Polished Brass, \$1.50.**No. 2552.** Malleable Iron Black Baked Enamel, \$1.00.**No. 2553.** Aluminum, \$1.50.*The Neverout*
TRADE MARK**FRONT LICENSE BRACKET**

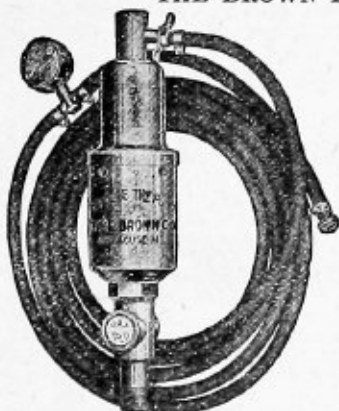
Patented in U. S. and Principal Foreign Countries. (See special literature for list of patents.)

**Model S. D.**—For Stoddard-Dayton, Overland, Kissel-Kar, and all cars with oval fillers. Attaches directly to water filler tube.**No. 2554.** Polished Brass, \$1.50.**No. 2555.** Malleable Iron Black Baked Enamel, \$1.00.**No. 2556.** Aluminum, \$1.50.*The Neverout*
TRADE MARK**REAR LICENSE BRACKET**

Patented in U. S. and Principal Foreign Countries. (See special literature for list of patents.)

**No. 2 Regular**—Fits majority of brackets on rear of cars.**No. 2080.** Polished Brass, \$1.50.**No. 2121.** Malleable Iron Black Baked Enamel, \$1.00.

Makes any tail lamp throw light directly on license tag. Slips on your present tail lamp bracket, whether round or flat. Tag cannot swing, cannot rattle, cannot mar car, cannot be lost—is firmly held in place by adjustable metal clasps.

THE BROWN IMPULSE TIRE PUMP.

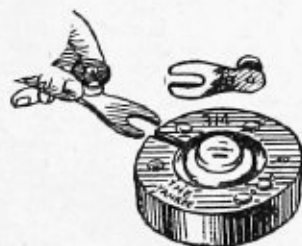
3288

Full directions with each pump.
In ordering give size of Spark Plug.

Quiet and noiseless in operation, perfectly balanced in all details the Brown Impulse Tire Pump offers a new era as air inflator. Our special breather valve shown connected to large or primary cylinder provides means of drawing into motor cylinder nothing but Pure Cold, Fresh Air, thus eliminating any oil or gasoline vapor. Works equally as well on dual or single ignition systems. The cylinder carrying pumps does not fire, hence you can select the most convenient Spark Plug for removal. Any tire can be inflated in from one to four minutes.

No. 3288. Regular price including 12 ft. Air Hose, High-Grade Recording Gauge, Self Opening Hose Connection, \$15.00. Cash Price, \$12.50.**YANKEE SWITCH.**

For Two Sets of Batteries.



1460

keys, Cash Price, 15c. extra.

Has a special key for connecting with batteries. It is neat, compact and thousands of them are in use all over the United States.

No. 1460. Yankee Switch, Cash Price, 39c.**No. 1460 A.** Yankee Switch**No. 3404**
No. 3405Half-pint cans
Pint cans**SLIKUP METAL FINISH (Ebony Black)**

Are you tired of continually polishing your brass? If so, refinish your lamps and other brasses with Slikup Metal Finish. Anyone can apply it and leave a smooth, hard, elastic finish that requires no other attention than washing. It will not crack or peel, and is more durable than plating. It will stand up to heat to which it is subjected in everyday service.

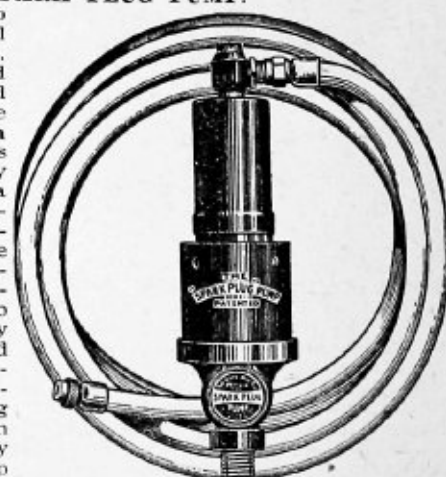
Black lamps are becoming more popular than brass, for it reduces expense and labor, adds distinctiveness to your car and will not reflect the sun into your eyes.

It can be removed at any time with very little trouble by following directions found on can. A pint will refinish all your lamps and brass work.

Size.	Regular Price.	Cash Price.
Half-pint cans	\$1.00	\$0.75
Pint cans	1.95	1.40

MAYO SPARK PLUG PUMP.

The Spark Plug Pump is adaptable for use on all 4-cycle motors of two, four or six cylinders and offers at last a simple and practical way to inflate tires using Pure Fresh Air without the laborious hard work of doing it by hand. Simply remove a Spark Plug from any convenient cylinder and substitute the pump (with the hands only) is the advantageous method of attaching to all motors. If so desired a valve cap may be tapped out and fitted with a permanent petcock, making it unnecessary to remove spark plug in using. The construction is simple and mechanically perfect throughout with no wearing parts to give trouble or get out of order. It is just like your engine with metal rings—built to last as long as your car.

No. 3289. Cash Price, including 12 ft. of Air Hose with adaptors to fit and car, with gauge, \$10.00.**No. 3290.** Same pump, etc., without gauge. Net cash price, \$9.00.

3289

REMEMBER WE PREPAY TRANSPORTATION CHARGES—SEE INSIDE FRONT COVER.

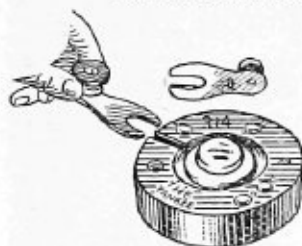
TYPE "P" "CONNECTICUT" SWITCH.

The peculiar shape of this switch and the arrangement of connecting plugs is such that it makes the switch strictly waterproof. Made of hard rubber and bronze.

No. 1459. Regular Price, \$1.00. Cash Price, 75c.

YANKEE SWITCH.

For Two Sets of Batteries.



1460
keys, Cash Price, 15c. extra.

Has a special key for connecting with batteries. It is neat, compact and thousands of them are in use all over the United States.

No. 1460. Yankee Switch, Cash Price, 39c.

No. 1460 A. Yankee Switch

PITTSFIELD MAGNETO SWITCH.

Especially designed for use with double system ignition. Large substantial handle can be used as a kick switch if desired. Hard rubber body, front plate of brass, gun metal finish.

No. 1479. Regular Price, \$2.00. Cash Price, \$1.49.

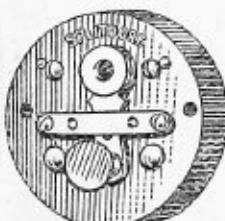


1479

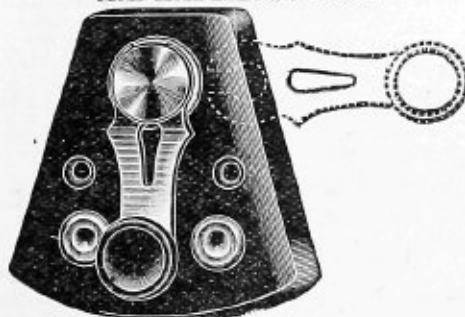
STANDARD "SPLITDORF" SWITCH.

One of the most reliable switches made, of hard rubber, brass metal parts. By pulling out plug, you disconnect both sets of batteries. Can be used with any double ignition set, storage, dry cell, dynamo or magneto.

No. 1478. Regular Price, \$1.00. Cash Price, 69c.



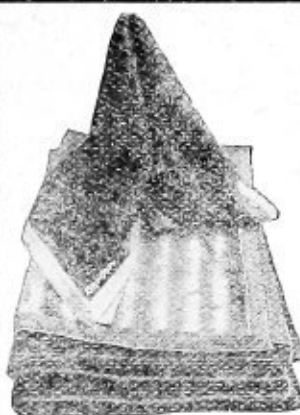
1478

MANHATTAN SWITCH.

1480

A first-class, reliable, high-grade switch sold at a reasonable price. Of hard rubber, except lever and contact points, which are spring bronze. Accommodates two sets of batteries.

No. 1480. Regular Price, \$1.00. Cash Price, 55c.



3291

No. 3291. Tan Linen. Size 52x60. Regular Price, \$3.00. Cash Price, \$2.00.

No. 3292. Tan Linen. Size 52x68. Regular Price, 3.25. Cash Price, \$2.25.

No. 3293. Tan Linen. Size 52x84. Regular Price, \$3.50. Cash Price, \$2.50.

No. 3294. Tan Herringbone Linen. Size 52x60. Regular Price, \$3.25. Cash Price, \$2.25.

No. 3295. Tan Herringbone Linen. Size 52x68. Cash Regular \$3.50. Cash Price, \$2.50.

No. 3296. Tan Herringbone Linen. Size 52x84. Regular Price, \$4.00. Cash Price, \$2.75.

No. 3297. Dark Tan Whip-Cord. Size 52x60. Regular Price, \$3.25. Cash Price, \$2.25.

No. 3298. Dark Tan Whip-Cord. Size 52x68. Regular Price, \$3.50. Cash Price, \$2.50.

No. 3299. Dark Tan Whip-Cord. Size 52x84. Regular Price, \$4.00. Cash Price, \$3.00.

No. 3300. Mohair, Dark Blue or Brown. Size 52x84. Regular Price, \$4.00. Cash Price, \$3.00.

No. 3301. Mohair, Dark Blue or Brown. Size 52x68. Regular Price, \$4.50. Cash Price, \$3.25.

No. 3302. Mohair, Dark Blue or Brown. Size 52x84. Regular Price, \$5.00. Cash Price, \$3.50.

No. 3303. Maroon Rubber, Linen Waterproof. Size 52x60. Regular Price, \$4.00. Cash Price, \$2.75.

No. 3304. Maroon Rubber, Linen Waterproof. Size 52x68. Regular Price, \$4.50. Cash Price, \$3.00.

No. 590. Single pole switch. List Price, 50c. Cash Price, 34c.

No. 592. 2 pole switch. List Price, 75c. Cash Price, 45c.

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SUMMER WEIGHT ROBES.

We have carefully selected this line of robes for 1910, and for workmanship and material it cannot be equaled. While they are not very heavy in weight they can be used in all seasons of the year.

Mohair, linen, rubber, whipcord.



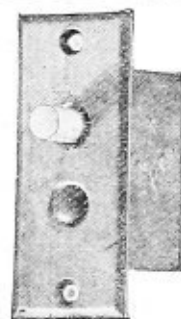
2386

No. 2386. Regular Price, 75c. Cash Price, 29c.

FLUSH PUSH BUTTON SWITCH.

By pressing the white button the light will be on and by pressing the black button the lights will be put out.

No. 589. List Price, \$1.50. Net Cash Price, 90c.



589

SPLITDORF'S ENCLOSED TYPE DOUBLE POLE CUT-OUT SWITCH, 1911 TYPE.

2385

This switch is of the double pole cut-out type, but has the advantage of having all the metal parts enclosed, so there is no possibility of a short circuit from the outside. Can be used with two sets of batteries or one set of batteries and a dynamo.

No. 2385. Price, complete, \$2.00. Our Price, \$1.00.

ELECTRIC LAMP CORD.

2382

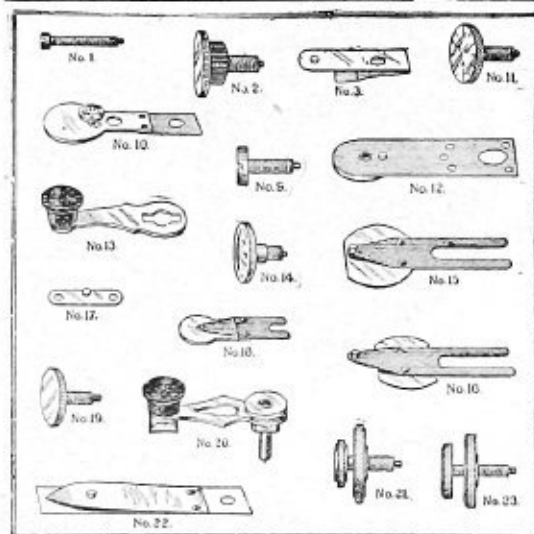
Standard cord as generally used for electric wiring. Very best quality.

Heavy, for general use—green and yellow mixed stripe braid.

No. 2382. Light, for inside of limousine.

2383. Green silk braid. Per foot, .021½

2384. Maroon silk braid. Per foot, .021½



AUTO COIL AND SWITCH PARTS.

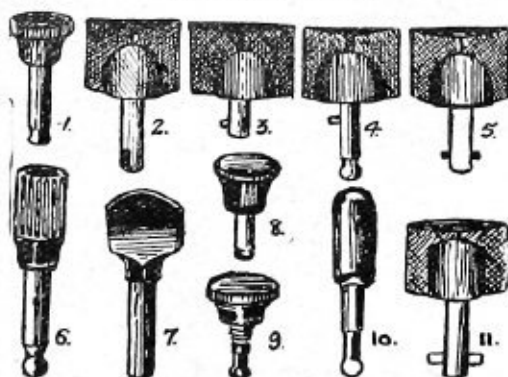
No. No.

No.	No.	Regular Price.	Cash Price.
1414	1. Contact screw, fits Thor Motor on Indian Motor Cycle.....	\$1.00	\$0.39
1415	2. Contact screw, fits Splitdorf Coil Platinum Point.....	1.00	.45
1416	3. Contact spring, fits Splitdorf Coil, Platinum Point.....	1.00	.45
1417	9. Contact screw, fits Splitdorf Coil, Platinum Point.....	1.00	.45
1418	10. Hammer spring, fits Splitdorf Coil.....	.15	.10
1419	11. Contact screw, fits Connecticut Coil, Platinum Point.....	1.00	.45
1420	12. Vibrator spring, fits Connecticut Coil.....	1.00	.45
1421	13. Switch lever, fits Connecticut Coil.....	.15	.10
1422	14. Contact screw, fits Heinze Coil, Platinum Point.....	1.00	.45
1423	15. Vibrator spring, fits Heinze 1907 Coil, Platinum Point.....	1.00	.45
1424	16. Vibrator spring, fits Heinze 1908 Coil, Platinum Point.....	1.00	.45
1425	17. Platinum seat, fits Heinze Coil, Platinum Point.....	1.00	.35
1426	18. Vibrator spring, fits Pittsfield Coil, Platinum Point.....	1.00	.45
1427	19. Contact screw, fits Pittsfield Coil, Platinum Point.....	1.00	.45
1428	20. Switch lever, Pittsfield Coil.....	.30	.15
1429	21. Adjusting screw, fits La Coste Coil, Platinum Point.....	1.25	.49
1430	22. Vibrator spring, fits La Coste Coil, Platinum Point.....	1.25	.49
1431	23. Contact screw, fits Auto Coil, Platinum Point.....	1.25	.49
1432	24. Contact screw, fits Pittsfield, 1908, Platinum Point.....	1.00	.45
1433	25. Contact spring, fits Connecticut, 1909, Platinum Point.....	1.00	.45

Note Carefully—These parts are made from the very best brass, copper and steel, and all the platinum contact points are the purest and best possible metal. All the parts are guaranteed to fit and work.

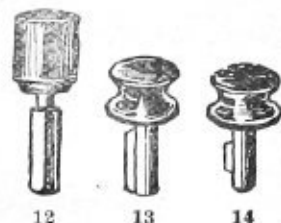
COIL SWITCH PLUGS.

Made of Brass, with Black Composition Tops
—Will Fit Perfectly.



No.	Coil.	Cash Price.
2365.	1. Splitdorf (open)	\$0.01
2366.	2. Splitdorf (closed)	.06
2367.	3. Heinze, 1908	.06
2368.	4. Heinze, 1909	.06
2369.	5. Pittsfield	.06
2370.	6. Connecticut	.06
2371.	7. Indian and Thor Motor Cycle	.05
2372.	8. Dow	.04
2373.	9. Kingston	.10
2374.	10. Jacobson	.06
2374.A	11. Remy	.07

OUR LATEST MODELS.



No.	Cash Price.
2377.	12. New Splitdorf Kick Plug.....10c
2378.	13. Heinze new 1910 .....10c
2379.	14. Heinze new 1911.....10c

COIL PARTS FOR SPLITDORF COILS.

Genuine Splitdorf Pure Platinum Points.



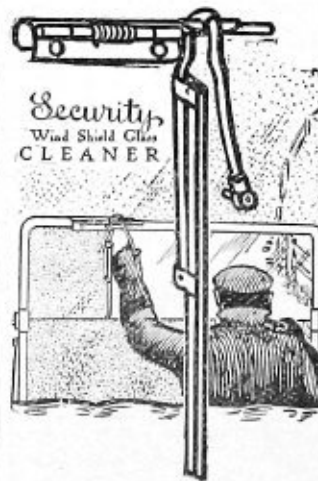
2A



3A

No.	Cash Price.
2380.	2A. Fits Splitdorf Coils.....75c.
2381.	3A. Fits Splitdorf Coils.....75c.

SECURITY WIND SHIELD GLASS CLEANER.



2084

instantaneously removed.

The SECURITY may be speedily attached without adjustment or the aid of tools on any make wind shield constructed of round metal tubing. It is so compact that it will not interfere with the folding or operation of the shield and it is so inconspicuous that it may be kept on the shield as a permanent fixture. It is practically indestructible.

Total weight, nine ounces.

No. 2084.	Regular Price, \$2.50.	Cash Price, \$1.25.
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When your vision is blurred, the SECURITY obviates the necessity of lowering the shield and exposing yourself to the storm, or leaving your seat, or removing both hands from the wheel for the purpose of wiping the glass. Draw the cleaner once across the glass and every particle of dust, every drop of rain or every flake of snow will be

MEN-DO.

A Perfect Tire and Tube Repair Outfit.



We cheerfully guarantee our MEN-DO outfit to repair all kinds of punctures in the inner tube. We further guarantee it to be permanent and not to pull off.

We further guarantee it to fill up holes in the tire and keep water or sand from working into the tire, provided directions are followed carefully.

Repairs the inner tube without heat. Becomes part of the tube the moment it is applied. No less than 20 repairs to the outfit. MEN-DO has become a universally used article and as a tube repair it is unsurpassed.

MEN-DO will fill up holes in the Tire Tread.

It thus avoids blowouts and the loosening of the tread from the fabric.
No. 3305. Regular Price, \$1.00. Cash Price, 69c.

TREADMEND.



3306

A preparation especially made for filling up holes in the tire tread also for sealing up long cuts caused by tin or glass. It is elastic, tough and will wear as well as the tread itself.

It is easily applied by cleaning hole thoroughly with gasoline and coating with Liberty Cement, then applying a ball of Treadmend after it has been rolled well between the fingers for at least 5 minutes.

By watching your tires and constantly using Treadmend you will add 50 per cent. life to the tread.

This preparation is similar to MEN-DO only it is sold separately.

No. 3306.	Regular Price, 50c.	Cash Price, 39c.
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REMEMBER WE PREPAY TRANSPORTATION CHARGES—SEE INSIDE FRONT COVER.

DRIVE CHAINS.

PEUGEOT CHAINS.



We carry chains in stock to fit the following cars: Panhard, Mercedes, Fiat, Rochet-Schneider, I. F. Berliet, Leon Bollee, C. G. V., English Daimler, Itala, Napier, Brazier, Martini, Pipe, etc., and will carry in stock chains on demand for any make of car.

Metric Size Chains—Regular Stock Sizes.

No.	Mfrs. No.	Pitch in In.	Width in In.	Diameter of Roller in.	Length of Chain in.	Each Chain, Reg. Price.	Cash Price.
1691	38 1/2	1 1/4	35	23/32	18	23/32	18
1692	"38 1/2 L"	1 1/4	35	23/32	18	23/32	18
1693	41	1 1/4	35	5/8	16	5/8	16
1694	41L	1 1/4	35	5/8	16	5/8	16

No. 1695. Price of parts for above chains, extra connecting links, each, Regular Price, 50c. Cash Price, 45c.

COMPLETE DRIVING CHAINS.

Price list of complete driving chains to fit all standard makes of cars. They are complete with master link and are ready to put on. Choice of Whitney, Diamond, Baldwin, Coventry or Genuine Peugeot French Chain, furnished at the following prices.

Always mention make of chain preferred, Whitney, Diamond, Baldwin, Peugeot or Coventry.

For American Cars.

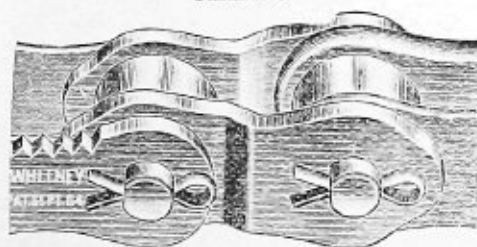
No.	Make of Car.	Diameter of Chain.	Length of Chain.	Regular Price.	Cash Price.
1696	Cadillac	1 x 1 1/2 x 5/8	7 1/2 ft.	\$7.50	\$6.40
1697	Buick	1 x 5/8 x 5/8	8 ft.	9.35	8.40
1698	Reo Touring	1 x 5/8 x 5/8	8 ft.	9.35	8.40
1699	Columbia	1 1/4 x 5/8 x 3/4	8 ft.	10.00	8.40
1700	Pope-Toledo	1 1/4 x 1 1/2 x 5/8	9 ft.	11.25	9.65
1701	Locomobile	1 1/4 x 5/8 x 5/8	7 1/2 ft.	8.75	7.40
1702	Thomas	1 x 5/8 x 5/8	8 ft.	10.00	8.40
1703	Rambler	1 x 5/8 x 5/8	8 ft.	10.00	8.40
1704	Reo Runabout	1 x 1 1/2 x 9/16	7 ft.	7.50	6.40
1705	Simplex	1 1/4 x 5/8 x 3/4	8 ft.	10.00	8.40
1706	Lozier	1 1/4 x 5/8 x 5/8	7 1/2 ft.	10.50	8.40

Please note that we only furnish chains from stock in full length, 7, 7 1/2, 8, 8 1/2 and 9 ft. Orders for a less quantity must be accompanied by cash with order, as we make shipments of shorter lengths direct from the factory.

This list shows sizes used on the 1907-08-09 models only. Please mention make, model and year of your car when you order.

Price of chains for other makes of cars will be mailed on request.

WHITNEY COTTER PIN TYPE DRIVE CHAINS.



1666

The leading American chain, in sizes generally used.

No.	Pitch.	Width.	Diam.	Cash Price.
1666—1 in.	1/2 in.	5/8 in.	5/8 in.	\$0.87
1667—1 in.	5/8 in.	5/8 in.	5/8 in.	1.00
1668—1 1/4 in.	1/2 in.	5/8 in.	5/8 in.	1.07
1669—1 1/4 in.	5/8 in.	5/8 in.	5/8 in.	1.07
1670—1 1/4 in.	5/8 in.	5/8 in.	5/8 in.	1.07

American Sizes French Chains.

No.	Pitch.	Width.	Diam.	Load.	Per Foot, Reg. Price.	Cash Price.
1715—1	1/2	5/8	9/16	5,000	\$1.00	\$0.85
1716—1	1/2	5/8	9/16	5,000	1.00	.85
1717—1	1/2	5/8	5/8	6,500	1.00	.85
1718—1	1/2	5/8	5/8	6,500	1.17	1.00
1719—1 1/4	1/2	5/8	5/8	7,500	1.25	1.10
1720—1 1/4	1/2	3/4	5/8	8,500	1.25	1.10
1721—1 1/4	1/2	5/8	5/8	7,500	1.25	1.10
1722—1 1/4	1/2	3/4	8,000	1.50	1.30	
1723—1 1/2	1/2	3/4	8,500	1.50	1.30	

Length of Chain, Reg. Price.

Roller	Breaking Load.	Chain.	Reg. Price.	Cash Price.
Mm.				
2 18.	Over 8,500 lbs.	3 ft.	\$14.00	\$11.90
2 18.	Over 8,500 lbs.	9 ft.	15.75	13.75
2 16.	Over 7,500 lbs.	8 ft.	14.00	11.90
2 16.	Over 7,500 lbs.	9 ft.	15.75	13.75
chains...extra connecting links, each, Regular				

For Foreign Cars.

No.	Make of Car.	Length of Chain.	Reg. Price.	Cash Price.
1707—	Panhard	8 ft.	\$14.00	\$11.80
1708—	Panhard	9 ft.	15.75	13.65
1709—	Mercedes	8 ft.	14.00	11.80
1710—	Mercedes	9 ft.	15.75	13.65
1711—	Berliet	8 ft.	14.00	11.80
1712—	Martini	8 ft.	14.00	11.80
1713—	Rochet-Schneider	9 ft.	14.00	11.80
1714—	Rochet-Schneider	9 ft.	16.00	13.70

DIAMOND DETACHABLE ROLLER CHAINS.



1678

The latest and best produced. A standard and reliable chain.

No.	Pitch.	Width.	Diam.	Cash Price.
1678—1 in.	1/2 in.	9/16 in.	9/16 in.	\$0.87
1679—1 in.	1/2 in.	9/16 in.	9/16 in.	.87
1680—1 in.	1/2 in.	5/8 in.	5/8 in.	.87
1681—1 in.	1/2 in.	9/16 in.	9/16 in.	.87
1682—1 in.	1/2 in.	5/8 in.	5/8 in.	1.00
1683—1 1/4 in.	1/2 in.	5/8 in.	5/8 in.	1.07
1684—1 1/4 in.	1/2 in.	3/4 in.	3/4 in.	1.07
1685—1 1/4 in.	1/2 in.	5/8 in.	5/8 in.	1.07
1686—1 1/4 in.	1/2 in.	3/4 in.	3/4 in.	1.07
1687—1 1/4 in.	1/2 in.	5/8 in.	5/8 in.	1.23
1688—1 1/4 in.	1/2 in.	3/4 in.	3/4 in.	1.23
1689—1 1/4 in.	1/2 in.	3/4 in.	3/4 in.	1.35
1690—1 1/2 in.	1/2 in.	3/4 in.	3/4 in.	1.35

BALDWIN CHAINS.



Cut No 1. Shows the Chain Assembled
BALDWIN Patent Pending



Cut No 2. Shows the Parts Separated

1724

Detachable or riveted.

No.	Mfrs. Pitch.	Width of Roller.	Diam.	Cash Price, Per Ft.
1724	13—1	1/2	9/16	\$0.90
1725	14—1	1/2	5/8	.90
1726	15—1	5/8	5/8	1.00
1727	16—1 1/4	1/2	5/8	1.10
1728	17—1 1/4	5/8	5/8	1.10
1729	18—1 1/4	5/8	3/4	1.10
1730	19—1 1/4	3/4	3/4	1.30

CONNECTING LINKS.

Master Links.



1731

Off-set Links.

No.	Size.	Cash Price.
1734	1 in.	\$0.25
1735	1 1/4 in.	.35
1736	1 1/2 in.	.45

Please mention make and model of your car and chain.

We ship on approval any article that you may select from this catalogue, and if for any reason, after you have examined the goods, they are not entirely satisfactory, you may return them at our expense.

COVENTRY WORMO ROLLER CHAINS.



1671

Finest imported chain for American cars.

The chain that is everlasting.

No.	Pitch.	Width.	Diam.	Cash Price, Per Ft.
1671—1 in.	1/2 in.	9/16 in.	9/16 in.	\$1.00
1672—1 in.	1/2 in.	5/8 in.	5/8 in.	1.00
1673—1 in.	5/8 in.	5/8 in.	5/8 in.	1.17
1674—1 1/4 in.	1/2 in.	5/8 in.	5/8 in.	1.25
1675—1 1/4 in.	5/8 in.	5/8 in.	5/8 in.	1.25
1676—1 1/4 in.	5/8 in.	3/4 in.	3/4 in.	1.25
1677—1 1/4 in.	5/8 in.	3/4 in.	3/4 in.	1.44

"WE NEVER TAKE THE OTHER FELLOW'S DUST; WE ALWAYS KEEP IN THE LEAD."

"THE GOD OF GOOD LUCK" AND OTHER STYLE RADIATOR CAPS.

In Guaranteed 24 kt. Gold Plate.

The line we illustrate below is the best selling proposition we have ever handled. Never before has there been such a demand for radiator ornaments. Everywhere the call is heard. Inquiries are in every mail from all sections of the country. Radiator emblems are the latest fashion, and motorists want them.



500



505-507



509



511

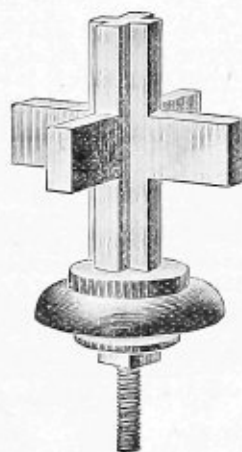


514

Eagle No. 500. Height 2 in. Width 3 in.
Cash Price59c.
Eagle No. 501. Height 3½ in. Width 5 in.
Cash Price75c.
Eagle No. 502. Height 4 in. Width 6 in.
Cash Price\$1.45

No. 505. 3 in. Cash Price50c.
No. 506. Height 3¼ in. Width 2 in.
Cash Price\$1.25
No. 507. Height 4½ in. Width 2½ in.
Cash Price\$1.50

No. 509. Height 3 in. Width 2 in.
Cash Price50c.
Eagle No. 510. Height 5 in. Width 4¼ in.
Cash Price\$1.60
F. & A. M. No. 511 Height 2½ in. Length 4½ in.
Cash Price\$1.60
Camel No. 514. Height 3½ in. Length 4 in.
Cash Price\$1.60



519

M. D. Cross No. 519. Height 3 in. Width 2½ in. Cash Price\$1.25

LEATHER STRAPS.



680

All our straps are made of best harness leather, brass buckles sewed on by hand. With a sliding loop, and neatly creased lines, along edges. Made in black or russet leather.

No.	Size. Width.	Size. Length.	Cash Price.
680	½ in.	18 in.	\$0.10
681	¾ in.	12 in.	.16
682	¾ in.	36 in.	.25
683	¾ in.	30 in.	.30
684	1 in.	36 in.	.35
685	1¼ in.	6 ft.	1.00
686	1¼ in.	8 ft.	1.25
687	1¼ in.	10 ft.	1.50

THE CHAIN ADJUSTER.

Holds chain together while placing in a new link. Simple and strong. A most useful and necessary tool.



698

No. 698. Regular Price, 25c. Cash Price, 15c.

IDEAL FOLDING ROBE RAIL.



691

Style C—Ideal Folding Robe Rail permits of a larger load than the stationary rail, but does not take up as much room when not in use. Tubing ¾ in., length over all, 33 in.
No. 691. Folding Robe Rail. Regular Price, \$3.00. Cash Price, \$1.50.

TRUNK RACKS.

Strongest and Best Made racks on the market. Substantially made. These racks are the standard style as used in general. Include all fittings.



688

No. 688. Double folding. Flat cold rolled steel, ¾x1½ in. wide. Special adjustable hangers and side braces that can be readily adjusted to fit any car. Price, \$2.50. Cash Price, \$1.25.

BRASS ROBE RAILS, HIGHEST GRADE.

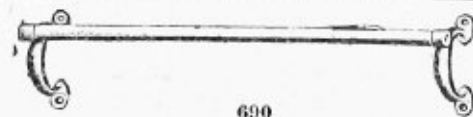
Made of polished brass tubing long enough to fit any make car. Furnished in any length from 28 to 34 in. Other sizes to order only, at 10 per cent. extra. The following styles will suit almost any car.



689

No. 689. Heavy weight brass. "S" handle, convenient as combination rail and handle. Regular Price, \$2.25. Cash Price, \$1.00.

No. 689A. Light weight brass. Cash Price, 65c.



690

No. 690. Heavy weight brass. "D" handle, same as above, except handle. Regular Price, \$2.25. Cash Price, \$1.00.

No. 690A. Light weight brass. Cash Price, 65c.

FOOT RESTS.

A necessity in tonneaus to enable occupants to keep themselves in comfortable position. Brass rails are 1 in. in diameter. 28 to 34 in. lengths in stock. Others to order only.

No. 692. Heavy weight brass foot rail. Regular Price, \$3.50. Cash Price, \$1.25.
No. 692A. Light weight brass. Cash Price, 95c.

ROYAL FOOT REST AND TOOL BOX.



692A

Rubber covered. Makes a very handy combination. Size, 27 in. long, 9 in. wide; height in front, 3 in.; height in back, 6 in.
No. 692A. List Price, \$6.00. Cash Price, \$3.75.

ADJUSTABLE FOOT REST.



3307

Made of 1 in. Brass Seamless Tubing, end castings made of solid brass, all highly polished; length 32 in. One end loose so the rail can be cut to any desired length.
No. 3307. Regular Price, \$3.00. Cash Price, \$1.75.

PREMIER MAGNETO COVER.



1748

Keep the magneto covered and save spark trouble. In ordering give name and make of magneto.

No.	List Price.	Cash Price.
1748....Leather	\$2.00	\$1.00
1749....Enameled duck.....	1.00	.50

REMEMBER WE PREPAY TRANSPORTATION CHARGES—SEE INSIDE FRONT COVER.

RADIATOR ORNAMENTS.

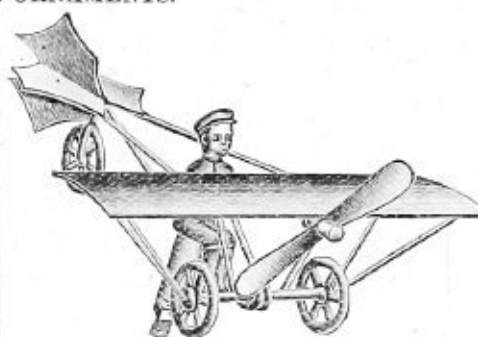
RONSON PIST-O-LITER.



SHRINER EMBLEM.

2185

No. 2185. Height 2 3/4 inches; width 4 1/2 inches.
Made of brass gold-plated.
Reg. price \$2.00; cash price \$1.00.

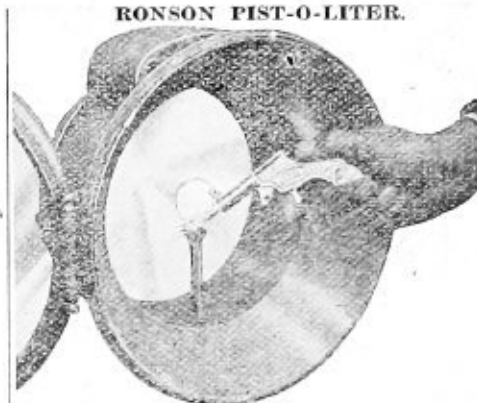


DEMOISELLE MODEL.

2189

The very latest ornament. Made of highly polished brass. Wing spread six inches; length 7 inches. The whirling propeller gives real life to your car. As the aeroplane turns in a swivel it always faces the wind.

No. 2189. Reg. Price \$2.50; cash price \$2.00.



2192

The Ronson Pist-o-liter is a clever new device that will ignite your auto lamps instantly. Simply pull the trigger, as with an ordinary pistol, and a series of sparks shoot from the muzzle, which ignite any inflammable gas. Cannot burn the fingers or clothing. Fits the vest pocket. No. 2192. Cash price 50c.



2186

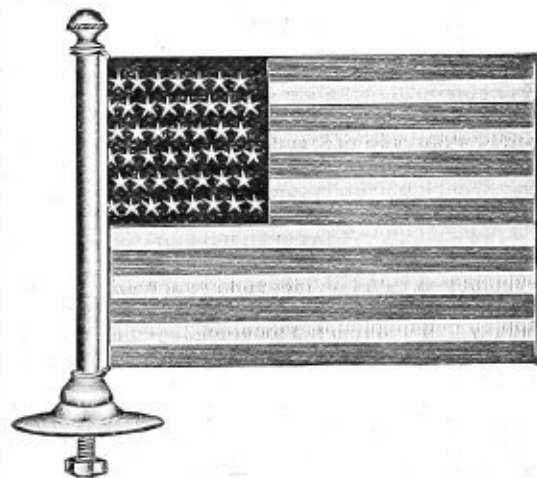
APCO PEDAL GRIPS.

Quickly attached to pedals of any car, these Pedal Grips provide a large, solid, steady pressure surface for the foot. They are made of corrugated rubber and the foot cannot slip.

Metal pedals, with their hard, icy, smooth, slipping surfaces, are always uncomfortable, and often unsafe. The thick rubber cushion takes up vibration and jar, resting you, whereas slippery metal pedals tire you.

No. 2186. Large size, per pair, cash price, 95c.

No. 2187. Small size, per pair, cash price, 85c.



2190

Be patriotic and use a nice silk American flag as a radiator ornament. This flag-staff is so arranged that when another flag is wanted it can be substituted without taking flag-staff from radiator cap. Size of flag 5 1/4 x 4 inches.
No. 2190. Reg. price \$1.00; cash price 75c.
No. 2191. Extra flags 25c each.

THE LITTLE STEERSMAN.

Reduces to a minimum the mental and physical strain of automobile driving, automatically corrects mistakes, so far as steering is concerned, whether made through oversight, inadvertence or unavoidable accident. It makes rough roads easy. It lessens wear on machine and tires and saves many times its cost in reduced tire expense. It automatically takes up lost motion between steering wheel and road wheels when steering gear is worn, keeping road wheels in perfect alignment.

This little device is always on the alert. No matter what contingency arises its elastic strength holds the car in the right direction, yet it diminishes in no degree the driver's control of the car, in fact it assists in better, quicker, more perfect control.

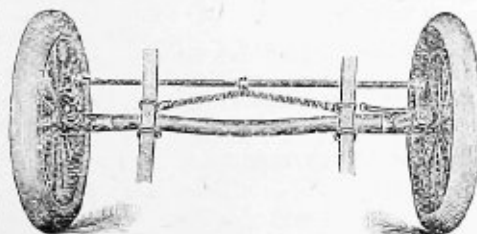
In traveling muddy or sandy roads, in turning out, leaving one set of wheels on the hard road, the other on the soft earth, or when coming in contact with stones, etc., the Little Steersman shows its real worth and stands every test. Under any of these conditions in place of "fighting the wheel" under a strain that tires mind and body to thwart the car's apparent determination to run into the ditch, the driver whose car is equipped with this wonderful little device finds that he can drive with one hand—that a new power seems to be in control and guides the car even better than the most expert driver could. With the Little Steersman the driving of ladies and beginners is like that of a veteran.

The Little Steersman is a simple device consisting of a helical spring about three feet in length made from oil tempered steel wire, with end attachments and centre clips made of high-grade drop steel forging and can be attached to any make of auto by anyone in a few minutes. The Little Steersman is fully guaranteed.

No. 2188. Regular price \$5.00; cash price \$3.50



LITTLE STEERSMAN

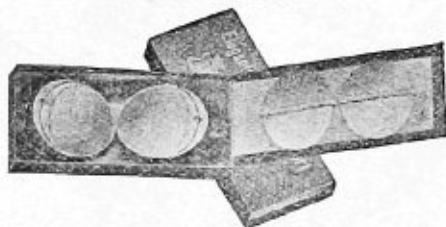


LITTLE STEERSMAN ATTACHED

Patented June 22, 1909

2188

WE GUARANTEE TO MAKE SHIPMENT OF YOUR ORDER THE SAME DAY AS RECEIVED.

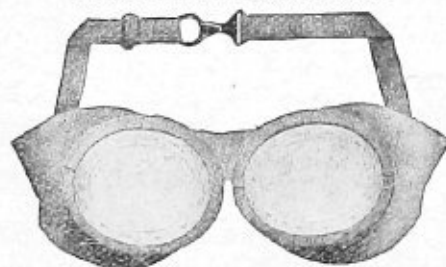
SO-EASY GOGGLES.

3308

Each goggle packed separate in cardboard box with extra pair curved smoked or amber lenses.

Collapsible stockinette eye-cups, chenille bound, leather bridge; curved lenses in a hinged frame making it exceptionally easy to interchange the lenses.

No. 3308. So-Easy Goggle, in pasteboard box. Regular Price, \$1.25. Cash Price, 75c.

RED RUBBER GOGGLES.

1788-3309

Made with rubber shield to conform to face. Has patent rubber cups allowing lenses to be removed, changed or replaced.

No. 1788. Regular Price, \$1.00. Cash Price, 29c.

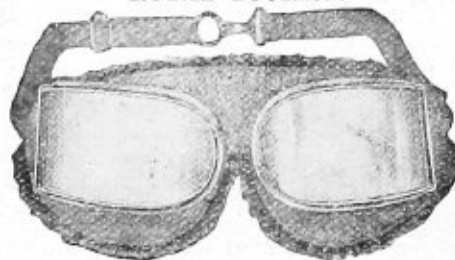
No. 3309. Extra quality flesh colored rubber goggle. List Price, \$1.50. Cash Price, 50c.

PANORAMIC GOGGLES.

1789

This is a popular French model, especially designed for ladies. Large single lense of curved optical glass. Collapsible, silk bound with chenille.

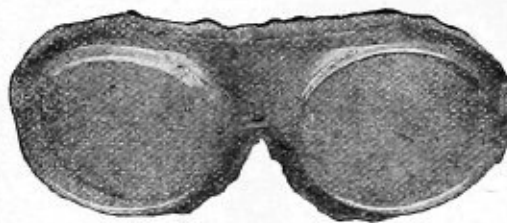
No. 1789. Cyclope French Goggle, in cardboard box. List Price, \$2.00. Cash Price, \$1.00.

ROYAL TOURIST.

1786

An excellent touring goggle with large curved removable lenses. The mask is of leather and bound with chenille.

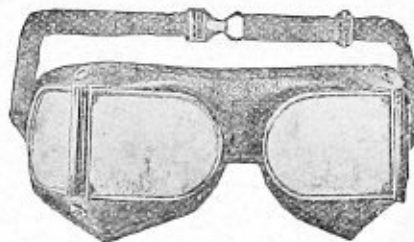
No. 1786. Regular Price, \$1.50. Cash Price, 69c.

1912 GOGGLES—ALL THE LATEST STYLES.**FOURNIER TYPE.**

1791

These are the well-known Fournier style, with polished bright aluminum, funnel-shape ventilated eye-cups, set in jointed, folding aluminum frame, making them compact.

No. 1791. Regular Price, each, 75c. Cash Price, 35c.

FOUR-WAY, WITH SIDE LIGHTS.

These goggles are the latest type, and afford the largest range of vision possible. Made with metal frame with four glasses, providing good front and side vision. Fine quality leather mask, lined with silk and bound. Adjustable elastic band with hook and eye.

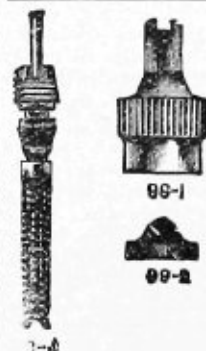
No.	List Price.	Cash Price.
No. 1792. Unlined	\$9.75	\$0.39
1793. Lined with silk.....	1.50	.49

CURVED LENS COLLAPSIBLE GOGGLE.

1790

This goggle is one of the latest, most scientifically designed and neatest of imported goggles. It is collapsible; and has low eye cups with extra large curved removable lenses; may be worn over spectacles or eye-glasses; plain edging and elastic head band.

No. 1790. Regular Price, \$2.50. Cash Price, \$1.25.

SCHRADER UNIVERSAL VALVE PARTS.

99-1

99-2

785

No. 785A—1, Valve Cap, Cash Price, per doz., 36c.

No. 785B—2, Cap Washer, Cash Price, per doz., 12c.

No. 785D—4, Inside Complete, Cash Price, per doz., 48c.

No. 785E—8, Dust Cap, 10c. each.

ANSONIA.

1787

The collapsible eye-cups of this goggle are of silk and constructed to set low on the face with "drop-eye" lenses that are removable. The new form lenses are extra large curved glass. This model may be worn over glasses.

No. 1787. Regular Price, \$1.50. Cash Price, 75c.

EASTMAN SPECIAL.

3313

Shallow aluminum eye-cups, bound with chenille and shaped to conform to the contour of face. Curved lenses of special shape giving a large field of vision.

No. 3313. Regular Price, \$1.50. Cash Price, 75c.

WRIGHT.

3314

This style is especially desirable for narrow pupillary distance. The curved lenses are large and the egg-shape form gives a large field. The silk eye-cups are collapsible and bound with chenille.

No. 3314. Regular Price, \$1.50. Cash Price, 95c.

TAXI.

3312

Shallow aluminum eye-cups ventilated, bound with chenille and shaped to conform to the features. The curved lenses are of special design and easily interchangeable.

No. 3312. Regular Price, \$1.50. Cash Price, 85c.

FLAT LEATHER OAK BELTING.

Strong, Durable.
No. 2243. $\frac{3}{8}$ in., per foot 18c.
No. 2244. 1 in., per foot 20c.
No. 2245. $1\frac{1}{4}$ in., per foot 25c.

2243

VACUUM MOBILOILS.

A high-grade, thoroughly efficient line of auto oils, used and recommended by the leading auto manufacturers.

Made in different consistencies for the lubrication of various types of automobiles.



1990

Arctic Mobiloil.—Medium body, light colored oil, for water-cooled motors for winter or summer. Has zero-cold test.

No.	Quantity.	Regular Price.	Cash Price.
1990	1 gal. can	\$1.00	\$0.75
1991	5 gal. can	4.50	3.25
1992	30 gal. barrel	20.00	17.40
1993	50 gal. barrel	30.00	27.50

"A" Mobiloil.—Medium body, dark colored oil, for water-cooled motors in summer

No.	Quantity.	Regular Price.	Cash Price.
1994	1 gal. can	\$1.00	\$0.75
1995	5 gal. can	4.50	3.25
1996	30 gal. barrel	20.00	17.40
1997	50 gal. barrel	30.00	27.50

"B" Mobiloil.—Heavy body, dark colored oil, for air-cooled motors or water-cooled motors with worn pistons.

No.	Quantity.	Regular Price.	Cash Price.
1998	1 gal. can	\$1.00	\$0.75
1999	5 gal. can	4.50	3.25
2000	30 gal. barrel	20.00	17.40
2001	50 gal. barrel	30.00	27.50

"C" Mobiloil.—A very heavy oil, for use in transmission cases where a fluid lubricant is required.

No.	Quantity.	Regular Price.	Cash Price.
2002	1 gal. can	\$0.65	\$0.55
2003	5 gal. can	3.00	2.25
2004	30 gal. barrel	12.50	11.40
2005	50 gal. barrel	20.00	17.50

"D" Mobiloil.—For all steam cars, such as White, Stanley, Lane, etc.

No.	Quantity.	Regular Price.	Cash Price.
2006	1 gal. can	\$1.25	\$0.95
2007	5 gal. can	6.00	4.25
2008	50 gal. barrel	35.00	37.50

"E" Mobiloil.—Light body, light colored oil, for water-cooled cars in winter.

No.	Quantity.	Regular Price.	Cash Price.
2009	1 gal. can	\$1.00	\$0.75
2010	5 gal. can	4.50	3.25
2011	30 gal. barrel	20.00	17.40
2012	50 gal. barrel	30.00	27.50

PANHARD AUTOMOBILE CYLINDER OIL.

2021

Light.—For water-cooled cars in winter.

No.	Quantity.	Cash Price.
2021	1 gal. can	\$0.75
2022	5 gal. can	3.50
2024	30 gal. barrel	16.50
2025	52 gal. barrel	26.00

Medium.—For water-cooled cars in summer.

No.	Quantity.	Cash Price.
2026	1 gal. can	\$0.75
2027	5 gal. can	3.50
2029	30 gal. barrel	16.50
2030	50 gal. barrel	26.00

Heavy.—For air-cooled cars in winter or water-cooled cars with loose pistons.

No.	Quantity.	Cash Price.
2031	1 gal. can	\$0.75
2032	5 gal. can	3.50
2034	30 gal. barrel	16.50
2035	50 gal. barrel	26.00

Extra Heavy.—For air-cooled cars in summer,

No.	Quantity.	Regular Price.	Cash Price.
2036	1 gal. can	\$1.00	\$0.75
2037	5 gal. can	4.50	3.50
2039	30 gal. barrel	18.00	16.50
2040	50 gal. barrel	27.00	26.00



2041

"HAVOLINE" MOTOR OILS.

Lubricants of Quality.

Havoline "Special."—Is a pure distilled, highly filtered, mineral oil, has a high fire test and retains its body under any temperature.

No.	Quantity.	Cash Price.
2041	1 gal. can	\$0.80
2042	5 gal. can	3.75
2043	10 gal. can	7.00
2043A	50 gal. bbl.	27.50

Havoline "Zero."—Remains fluid at a temperature of 5 degrees above zero, it is medium bodied and highly filtered.

No.	Quantity.	Cash Price.
2044	1 gal. can	\$0.80
2045	5 gal. can	3.50
2046	10 gal. can	6.50
2046A	50 gal. barrel	21.00

Havoline Packard, Medium Oil.—Light in color and the highest grade possible.

No.	Quantity.	Cash Price.
2047	5 gal. can	\$3.25
2048	10 gal. can	5.25
2049	30 gal. barrel	13.50
2950	50 gal. barrel	19.75

Half barrels of any of the above oils, same prices as barrel lots, but \$1.00 charged extra for half barrel.

POLARINE OIL.

3315

Polarine Oil is the final product of the most skillful tests in the laboratory, supplemented by exhaustive practical trials on the road. The object has been to produce an oil that leaves no carbon deposits and that at the same time gives uniform and complete lubrication. Polarine meets these requirements. It burns clearly and does not foul spark plugs valves or cylinders. It forms a lasting film on the bearing surfaces that greatly lessens friction and wear. It does not thin out at any speed or heat, yet it keeps a free-feeding body right down to zero temperature.

No.	Quantity.	Regular Price.	Cash Price.
3315	1 Gal. Tins.	75c.	65c.
3316	5 Gal. Tins.	Reg. Price, \$3.50.	Cash Price, \$2.50.
3317	1/2 Bbls., 30 Gal.	Reg. Price, \$17.50.	Cash Price, \$13.00.
3318	Bbls., 50 Gal.	Reg. Price, \$30.00.	Cash Price, \$19.75.

"VACUUM" TRANSMISSION GREASE.

2051

The original non-fluid oil. Can be used wherever grease is used. Does not drip, gum or cause heating. Recommended by the leading auto manufacturers.

Furnished in two grades. **Vacuum Light.**—Prepared for sliding gear and planetary transmissions where cases are tight and gears are in good condition. This grease will deaden sound of gears, lubricating the gear mesh as well as the main and counter shaft bearings.

It has a light body and can be used in an oil gun.

No.	Quantity.	Regular Price.	Cash Price.
2051	5 lb. can	\$1.25	\$0.79
2052	10 lb. can	2.00	1.49

Vacuum Heavy.—A light colored, heavy bodied grease for sliding gear transmissions where the parts are worn and case not tight. It will form a packing in bearings and gears, deadens sound and can be held in cases where a lighter grease would leak and waste. Can also be used in planetary transmissions of the Ford type, as well as in the differential gear case of the enclosed type.

No.	Quantity.	Regular Price.	Cash Price.
2053	5 lb. can	\$0.75	\$0.79
2054	10 lb. can	\$1.25	1.49

We ship on approval any article that you may select from this catalogue, and if for any reason, after you have examined the goods, they are not entirely satisfactory, you may return them at our expense.

Note on the above oils and greases.—We prepay transportation charges (to points not over 500 miles from New York) on all oils and greases. When your order amounts to \$10.00 or over—reserving the right to ship via freight or express.

"YOU HEAR MUCH ABOUT LOW PRICES: COMPARE THEM WITH OURS, AND DON'T FORGET QUALITY."

FOLDING CANVAS BUCKET.

Open.
1476

A most durable and convenient article. Made of heavy water-tight canvas, reinforced with strong, non-rustable metal. Folds into a very small space, holds about 3 gal., the size of an ordinary pail when open.

No. 1476. With funnel, splash guard and handle. Price, \$2.00. Cash Price, \$1.50.

No. 1477. With handle only. Price, \$1.50. Cash Price, \$1.25.

"ALBANY" GREASE.

2013

any gear, joint, clutch, spindle or part where grease is required.

Grade 0.—For Packing, Transmission, Ensemble, Equalizing Gears in Winter.

No.	Size.	Regular Price.	Cash Price.
2013	1 lb. can	\$0.25	\$0.16
2014	5 lb. can	1.00	.75
2014A	10 lb. can	2.00	1.50

Grade 1, Same as Grade "0," for Summer Use.

No.	Size.	Regular Price.	Cash Price.
2015	1 lb. can	\$0.25	\$0.16
2016	5 lb. can	1.00	.75
2016A	10 lb. can	2.00	1.50

Grade 2, for Compression Cups, Axle Bearings, Etc., in Winter.

No.	Size.	Regular Price.	Cash Price.
2017	1 lb. can	\$0.25	\$0.16
2018	5 lb. can	1.00	.75
2018A	10 lb. can	2.00	1.50

Grade 3, Same as "2," for Summer Use.

No.	Size.	Regular Price.	Cash Price.
2019	1 lb. can	\$0.25	\$0.16
2020	5 lb. can	1.00	.75
2020A	10 lb. can	2.00	1.50

The quality is the same in each grade, the difference is only in consistency.

NON-FLUID OIL.

New York & New Jersey Lubricant Co. make.

No.	Size.	List Price.	Cash Price.
2055	3 lb. can	\$0.75	\$0.54
2056	5 lb. can	1.25	.84
2057	10 lb. can	2.00	1.50

K Special or K, same price.



2055

AMALIE NON-FLUID OIL.

2433

The finest non-fluid oil on the market. Operates equally well in any climate and will not drip or leak out.

Soft.—For Transmission, Gear Cases, Timers, etc.

No.	Size.	Regular Price.	Cash Price.
2433	5 lb. cans	\$1.00	\$0.59
2434	10 lb. cans	2.00	1.10

Medium.—For Differentials, Roller and Ball Bearings, Axles, etc.

No.	Size.	Regular Price.	Cash Price.
2435	5 lb. cans	\$1.00	\$0.59
2436	10 lb. cans	2.00	1.10

Hard.—For Compression Cups, feed slowly and steadily.

No.	Size.	Regular Price.	Cash Price.
2437	5 lb. cans	\$1.00	\$0.59
2438	10 lb. cans	2.00	1.10



2439

DIXON'S FLAKE GRAPHITE.

This is the thinnest, toughest, smoothest graphite known, and the only one that will properly even up the minute irregularities found in all bearing surfaces.

No. 2439. Reg. Price, 30c. Cash Price, 20c.

DIXON'S CHAIN COMPOUND.

1630

A solid cake of graphite lubricant weighing about 3 lbs. Excellent for lubricating chains.

No. 1630. With directions. Cash Price, 80c.



1631

DIXON'S 688 WOOD GREASE.

Composed of high grade graphite thoroughly mixed with finely ground cedar sawdust. Reduces noise and wear, acts as a cushion for gear teeth—never cakes.

For enclosed gears only.

No.	Size.	Regular Price.	Cash Price.
1631	1 lb. can		\$0.18
1632	5 lb. can		\$1.00

DIXON'S MOTOR GRAPHITE.

1627

Made from the purest and most carefully selected flake graphite and ground to the very finest degree.

Recommended for use in cylinders of steam and gasoline motors and for crank cases in splash system lubrication.

When mixed with cylinder oil in proportion of one teaspoonful to a pint of oil, it can be used in positive, force-feed lubricators.

No.	Size.	Regular Price.	Cash Price.
1627	1/2 lb. can	\$0.30	\$0.25
1628	1 lb. can	.50	.45
1629	5 lb. can	2.00	1.75

DIXON'S 677 GRAPHITE GREASE

1635

Prepared especially for all motor uses.

The finest grade graphite combined with best quality lubricating properties that will resist heat that no other grease can stand.

Very fine for gears, slides, axles and bearings of all kinds.

No.	Size.	Cash Price.
1635	1 lb. can	\$0.28
1636	5 lb. can	1.19

BUCKEYE CLEANSER.

The Soap That Makes Things Shine.



1640

The polished surface of an automobile are the parts that appeal to the eye. Their appearance and preservation are of utmost importance to every owner or chauffeur. Therefore, great care should be used in washing the polished surfaces or their lustre will disappear in a very short time.

Directions: First use the hose on all varnished surfaces so as to loosen up the dust and dirt, which should be washed off thoroughly before using the sponge, in order to prevent scratching the surface. Then with a clean sponge apply a heavy suds, especially to those parts that are greasy and oily. Rinse off at once with clear water, using a hose or clean sponge and wipe dry.

Never use for sudsing the same sponge used for washing off the dust and dirt.

The water may be just warm enough to have the chill taken off, but never use hot water on automobiles.

If the gearing, axles and wheels are very oily and greasy, use a heavy suds, giving an extra rub and rinse with a hose.

No.	Size.	Cash Price.
1640	5 lb. Pails	60c.
1641	10 lb. Pails	\$1.10
1642	25 lb. Pails	\$2.50

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